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1 2 3 4	FITZGERALD JOSEPH LLP JACK FITZGERALD (SBN 257370 <i>jack@fitzgeraldjoseph.com</i> PAUL K. JOSEPH (SBN 287057) <i>paul@fitzgeraldjoseph.com</i>				
5	MELANIE PERSINGER (SBN 275423) melanie@fitzgeraldjoseph.com TREVOR M. FLYNN (SBN 253362)				
6 7	<i>trevor@fitzgeraldjoseph.com</i> Caroline Emhardt (SBN 321222)	-)			
8 9	<i>caroline@fitzgeraldjoseph.com</i> 2341 Jefferson Street, Suite 200 San Diego, California 92110				
10	Phone: (619) 215-1741 Counsel for Plaintiff				
11 12	UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF CALIFORNIA				
13 14					
15			Case No: 3:2	21-cv-01446-B	TM-MSB
16 17	EVLYN ANDRADE-HEYMSFIELD, on behalf of herself, all others similarly situated, and the general public, Plaintiff, V.		CLASS ACTION FIRST AMENDED COMPLAINT FOR VIOLATIONS OF CAL. BUS. & PROF. CODE §§17200 <i>et seq.</i> ; CAL. BUS. & PROF. CODE §§17500 <i>et seq.</i> ; CAL. CIV. CODE §§ 1750 <i>et seq.</i> ; and BREACH OF EXPRESS WARRANTIES		
18 19					
20 21	NEXTFOODS, INC., Defendant.				
22			DEMAND F	<u>FOR JURY TR</u>	JAL
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	Andrade-Heymsfield v. NextFoods, Inc., 3:21-cv-01446-BTM-MSB FIRST AMENDED COMPLAINT				

Plaintiff Evlyn Andrade-Heymsfield, on behalf of herself, all others similarly situated, 1 and the general public, by and through her undersigned counsel, hereby sues Defendant 2 3 NextFoods, Inc. ("NextFoods"), and alleges the following upon her own knowledge, or where she lacks personal knowledge, upon information and belief, including the investigation of her 4 5 counsel.

INTRODUCTION

For several years, NextFoods has sold a line of fruit juice beverages branded 7 1. GoodBelly Probiotic JuiceDrinks (the "JuiceDrinks").¹ NextFoods represents on their labels 8 that the JuiceDrinks promote "digestive health" and thereby promote "overall health," and 9 10 "overall wellness."

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The labeling of the JuiceDrinks is false or highly misleading for several reasons. 12 3. First, representations that the JuiceDrinks promote "digestive health" are false, or at least highly misleading, because the sugar contained in the JuiceDrinks directly harms 13 digestive health. A reasonable consumer would not expect a product labeled as promoting 14 "digestive health" to contain large amounts of another substance that directly and 15 significantly harms digestive health, and thus would be mislead. 16

Second, representations that the JuiceDrinks promote digestive health and 4. 17 thereby promote "overall health," and "overall wellness" are also false, or at least highly 18 misleading. This is because the sugar contained in the JuiceDrinks directly harms digestive 19 health and those harmful effects to the digestive system increase inflammation which and 20 thereby increase risk of metabolic syndrome, obesity, and type 2 diabetes. A reasonable 21 consumer would not expect a product labeled as promoting "overall health," and "overall 22 wellness" to contain large amounts of another substance that directly and significantly 23

- 24 25
- 26 ¹ This includes at least the following varieties: Tropical Green, Blueberry Acai, Pomegranate Blackberry, Mango, Cranberry Watermelon, Strawberry Banana, Raspberry Blackberry, 27 Orange, and Peach Mango Orange. For exemplars of the JuiceDrinks' labeling available at 28 the time of filing, see Appendix 1.

increases risk of chronic diseases like metabolic syndrome, obesity, and type 2 diabetes and
 others.

5. Third, given the representations that the JuiceDrinks promote "digestive health"
and also thereby promote "overall health," and "overall wellness," the JuiceDrinks omit
material facts regarding the harmful effects of sugar on both digestive and overall health.

6 6. Plaintiff brings this action against NextFoods on behalf of herself, similarly7 situated Class Members, and the general public to recover compensation for injured Class
8 Members.

JURISDICTION & VENUE

7. This Court has original jurisdiction over this action under 28 U.S.C. § 1332(d)(2)
(The Class Action Fairness Act) because the matter in controversy exceeds the sum or value
of \$5,000,000, exclusive of interest and costs, and at least one member of the class of
plaintiffs is a citizen of a State different from NextFoods.

14 8. The Court has personal jurisdiction over NextFoods because it has purposely
15 availed itself of the benefits and privileges of conducting business activities within California,
16 specifically through distributing and selling the JuiceDrinks at issue in California and
17 transactions giving rise to this action occurred in California.

9. Venue is proper pursuant to 28 U.S.C. § 1391(b) and (c), because NextFoods
resides (*i.e.*, is subject to personal jurisdiction) in this district, and a substantial part of the
events or omissions giving rise to the claims occurred in this district.

PARTIES

22 10. Plaintiff Evlyn Andrade-Heymsfield is a resident and citizen of San Diego
23 County, California.

24 11. Defendant NextFoods, Inc. is a Colorado corporation with its principal place of
25 business in Boulder, Colorado.

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FACTS

I. NEXTFOODS MARKETS THE JUICEDRINKS AS BENEFICIAL TO DIGESTIVE AND OVERALL HEALTH

NextFoods was founded by two food industry veterans who helped popularize 12. 4 products consumers perceive as healthy, like Silk Soymilk. Their self-described mission "was 5 born out of the age-old mantra that food is the best medicine."² According to one founder's 6 "epiphany," the Baby Boomer generation needs "some help having long, happy, healthy and 7 8 active lives . . . but they need a means to do it and [sic] that means is better food."³ The company was started in late 2006, with the promise that its products would have 9 "scientifically substantiated health benefits combined with the goodness and responsibility of 10 healthy, natural foods."⁴ NextFoods communicates to consumers that the JuiceDrinks are 11 12 "just the thing to give us that extra boost we need as we're trekking along on our own personal journeys toward GoodHealth and nutrition."5 13

14 13. As NextFoods is well aware, consumers prefer healthful foods and are willing
15 to pay more for, or purchase more often, products marketed and labeled as healthy. For
16 instance, a Nielsen 2015 Global Health & Wellness Survey found that "88% of those polled
17 are willing to pay more for healthier foods."⁶

18 14. Accordingly, NextFoods markets the JuiceDrinks as promoting digestive health,
19 as well as "overall" health and wellness, by placing on the JuiceDrinks' labels, statements
20 that expressly or implicitly convey the message that the JuiceDrinks are healthy.

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² NextFoods Inc., "About" Page, https://goodbelly.com/about (last visited July 7, 2021).

24 $||^{3}$ Id.

25 $\|^{4}$ See id.

 $26 \|_{5} Id.$

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⁶ Nancy Gagliardi, "Consumers Want Healthy Foods--And Will Pay More For Them,"
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⁷ Forbes (Feb. 18, 2015) (citing Neilson, Global Health & Wellness Survey, at 11 (Jan. 2015)).

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15. During the Class Period, the JuiceDrinks' labels bore at least the following statements, which individually and in the context of the label as a whole, convey a message that the JuiceDrinks promote digestive health and overall health:

- a. "START YOUR GOODHEALTH GAME PLAN . . . Drink one 8 oz. glass of delicious GoodBelly a day for 12 days.";
 - b. "Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles the rest of you does too."
 - c. "WE DIG SCIENCE. LP299V is naturally occurring in the human gut. It has been studied more than 2 decades and has numerous research trials to show that it may help promote healthy digestion and overall wellness"; and

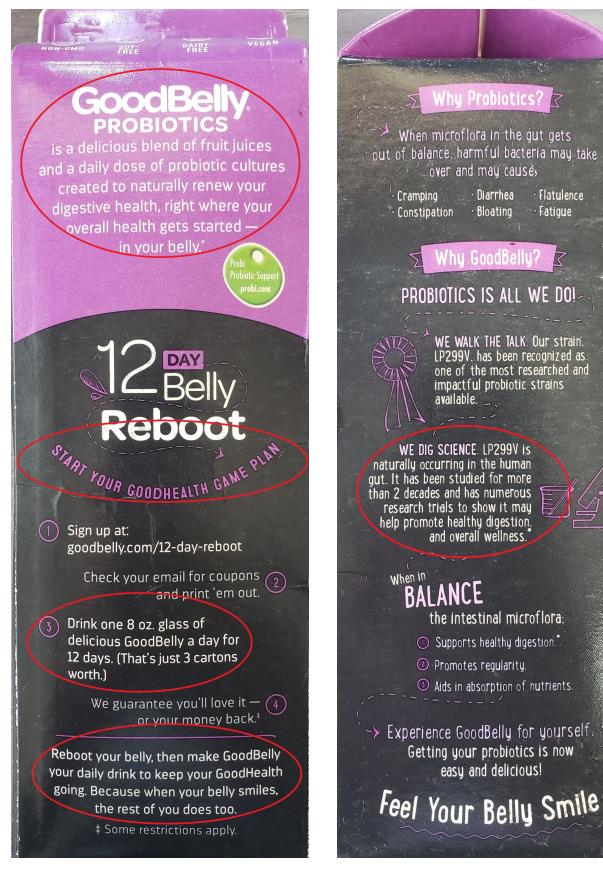
d. "GoodBelly Probiotics is a delicious blend of fruit juices and a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started – in your belly."⁷

⁷ According to NextFoods, "Probiotics are living microorganisms, which, when taken in adequate amounts, have a beneficial effect on the body." *See* NextFoods Inc., "The Science"
Page, https://goodbelly.com/goodhealth (last visited July 7, 2021).

An exemplar of the JuiceDrinks' health and wellness labeling is shown below. 16.

Flatulence

• Fatigue



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II. SCIENTIFIC EVIDENCE DEMONSTRATES THAT CONSUMING SUGAR, LIKE THAT IN NEXTFOOD'S JUICEDRINKS, HARMS DIGESTIVE HEALTH

A. The Sugar in the NextFoods JuiceDrinks Harms the Gut Microbiota

5 17. Diet plays a central role in shaping the microbiota that make up the gut biome 6 in human' digestive tracts. In fact, studies "suggest that diet has a dominant role over other 7 possible variables such as ethnicity, sanitation, hygiene, geography, and climate, in shaping 8 the gut microbiota."⁸

9 18. Studies also show that certain types of nutrients have specific effects on the gut
10 microbiota.

11 19. "For example, complex polysaccharides commonly referred to as dietary fiber,
12 remain undigested in the small intestine, reach the microbiota in the distal gut, and promote
13 colonization by beneficial microbes associated with lean and healthy individuals."⁹

20. "Conversely, diets rich in simple sugars favor the expansion of [harmful
microbial] organisms . . . "¹⁰ in at least four separate ways.

28 $\| {}^{10} Id.$

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¹⁸ ⁸ De Filippo, C., et al., "Impact of diet in shaping gut microbiota revealed by a comparative 19 study in children from Europe and rural Africa," PNAS, Vol. 107, No. 33, 14691-14696 (August 17, 2010); see also Brown, K, et al., "Diet-Induced Dysbiosis of the Intestinal 20 Microbiota and the Effects on Immunity and Disease," Nutrients 2012, 4, 1095-1119 ("the 21 composition of the gut microbiota strongly correlates with diet as demonstrated by a study assessing the relative contributions of host genetics and diet in shaping the gut microbiota" 22 "dietary changes could explain 57% of the total structural variation in gut microbiota whereas 23 changes in genetics accounted for no more than 12% This indicates that diet has a dominating role in shaping gut microbiota") [hereafter "De Filippo, Diet-Induced Dysbiosis of the 24 Intestinal Microbiota"]. 25

⁹ Townsend II, G., et al., "Dietary sugar silences a colonization factor in a mammalian gut symbiont," PNAS, Vol. 116, No. 1, 233-238 (January 2, 2019) [hereinafter "Townsend II, Dietary sugar silences a colonization factor"].

First, simple sugars serve as a nutrient for harmful bacteria and "[r]ecent studies
 have shown that high intake of sugars increase the relative abundance of [harmful]
 Proteobacteria in the gut, while simultaneously decreasing the abundance of [beneficial]
 Bacteroidetes. "¹¹

5 22. Second, and importantly, high sugar diets result in "lost gut microbial
6 diversity."¹²

7 23. Third, independent of their effect as a nutrient for harmful microbiota, because
8 consuming sugar increases bile output, "[r]efined sugars," also "mediate the overgrowth of
9 opportunistic[, harmful] bacteria like C. difficile and C. perfringens,"¹³ which feed on the
10 bile.

11 24. Fourth, sugar "can impact gut colonization by the microbiota independently of
12 their ability to serve as nutrients" since both "fructose and glucose silence a critical
13 colonization factor, called Roc, in a widely distributed gut commensal bacterium B.
14 thetaiotaomicron." ¹⁴

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¹¹ Satokari, R., "High Intake of Sugar and the Balance between Pro- and Anti-Inflammatory
¹⁸ Gut Bacteria," *Nutrients* 2020 May, 12(5), 1348 (published online May 8, 2020) [hereinafter
¹⁹ "Satokari, High Intake of Sugar"].

¹² Ho Do, M., et al., "High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders in Mice without Body Weight Change," *Nutrients* 2018, 10, 761 (June 13, 2018) [hereinafter "Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders "]; *see also* Jian-Mei Li, et al., "Dietary fructose-induced gut dysbiosis promotes mouse hippocampal neuroinflammation: a benefit of short-chain fatty acids," *Microbiome*, 7, Article No. 98 (2019) (June 29, 2019) ("The abundance of Bacteroidetes was significantly decreased and Proteobacteria was significantly increased in fructose-fed mice") [hereinafter "Jian-Mei Li, Dietary fructose-induced gut dysbiosis"].

¹³ De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8.

¹⁴ Townsend II, Dietary sugar silences a colonization factor, *supra* n.9 ("dietary simple sugars can suppress gut colonization in a commensal bacterium just by altering the levels of a colonization factor [know as Roc] dispensable for the utilization of such sugars.").

25. These changes in the gut microbiota composition harm digestive health and increase risk of chronic digestive track conditions.

3 26. Specifically, "[e]vidence suggests that the composition of the intestinal
4 microbiota can influence susceptibility to chronic disease of the intestinal tract including
5 ulcerative colitis, Crohn's disease, celiac disease and irritable bowel syndrome¹⁵

6 27. "Evidence [also] suggests that the composition of the intestinal microbiota can
7 influence susceptibility to ... more systemic diseases such as obesity, type 1 diabetes and
8 type 2 diabetes."¹⁶

9 28. In sum, "high sugar intake may stagger the balance of microbiota to have 10 increased pro-inflammatory properties and decreased [] capacity to regulate epithelial 11 integrity and mucosal immunity. Consequently, high dietary sugar can, through the 12 modulation of microbiota, promote metabolic endotoxemia, systemic (low grade) 13 inflammation and the development of metabolic dysregulation and thereby, high dietary sugar 14 may have many-fold deleterious health effects, in addition to providing excess energy."¹⁷

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The Sugar in the NextFoods JuiceDrinks Harms the Gut Barrier

29. "The gut barrier consists of a specialized, semi-permeable mucosal, and
epithelial cell layers that are reinforced by tight junction proteins. Among other functions,
this barrier serves to regulate nutrient and water entry and prevents the entry of harmful
compounds into extra-luminal tissues" and the blood.¹⁸

¹⁵ De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8. ¹⁶ *Id.*

¹⁷ Satokari, High Intake of Sugar, *supra* n.11.

¹⁸ Noble, E., et al., "Gut to Brain Dysbiosis: Mechanisms Linking Western Diet Consumption, the Microbiome, and Cognitive Impairment," *Front Behav. Neurosci.* 2017, 11:9 (published online January 30, 2017).

30. When the permeability of the gut or epithelial barrier is increased, this "allows for the influx of adverse substances and may ultimately contribute to the development of metabolic disorders, and cognitive dysfunction."¹⁹

- 31. "A compromised gut barrier makes the intestinal tract potentially vulnerable to
 the gram-negative bacteria-derived LPS, which upon excess entry into circulation promotes
 endotoxemia and systemic inflammation."²⁰

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32. Both glucose and fructose increase gut barrier permeability.

33. "Although dietary fructose was thought to be metabolized exclusively in the
liver, evidence has emerged that it is also metabolized in the small intestine and leads to
intestinal epithelial barrier deterioration."²¹ A high fructose diet, for example, has been found
to result in the "thinning of the intestinal mucosa, epithelium, and muscularis mucosae; loss
of crypts and glands" among other harmful effects.²²

- 34. The "increase[d] intestinal permeability," in turn "precedes the development of
 metabolic endotoxemia, inflammation, and lipid accumulation, ultimately leading to hepatic
 steatosis and normal-weight obesity." ²³
- 16 35. In addition, "[t]he monosaccharide fructose can escape absorption in the small
 17 intestine and reach the microbiota in the distal gut, where microbiota-derived products of
 18 fructose metabolism enter the host blood."²⁴
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²¹ Febbraio, M., et al., "Sweet death': Fructose as a metabolic toxin that targets the gut-liver axis," Cell Metab. 2021 Dec 7;33(12):2316-2328 (published online October 6, 2021)
²⁴ [hereinafter "Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis"].

25 $||_{22}$ Jian-Mei Li, Dietary fructose-induced gut dysbiosis, *supra* n.12.

- ²⁶
 ²³ Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders, *supra* n.12.
- 28 $||^{24}$ Townsend II, Dietary sugar silences a colonization factor, *supra* n.9.

 $^{20 ||^{19}} Id.$

²⁰ *Id.* (Studies have found "elevated plasma levels of a gavaged fluorescent molecule (FITC-dextran) that is typically unable to cross the gut barrier.").

36. Thus, "excessive fructose consumption" has been shown to "result[] in barrier deterioration, dysbiosis, low-grade intestinal inflammation, and endotoxemia."²⁵

3 37. In short, consuming fructose, like that in the GoodBelly JuiceDrinks, has
4 numerous harmful effects on the gut barrier.^{26, 27, 28, 29}

5 38. Like fructose, glucose also harms the gut barrier. For example, both a "[high 6 glucose diet] and [high fructose diet] increased gut permeability and disrupted the gut 7 barrier."³⁰ This harms the health of the digestive track because "damaged gut barriers" lead 8 to endotoxins crossing the epithelial and into the blood stream, resulting in "higher [blood] 9 plasma endotoxin levels."³¹

39. Not only does glucose harm the gut barrier from within the digestive track, high
levels of glucose in the blood, known as "[h]yperglycemia[,] markedly interfered with

- 13 $||^{25}$ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21.
- ¹⁴ ²⁶ Satokari, High Intake of Sugar, *supra* n.11 ("consuming high amounts of sugar harms the
 ¹⁵ gut by "increasing small intestinal permeability in healthy humans,").
- ¹⁶
 ²⁷ Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders, *supra* n.12 ("diet induced changes in the gut microbiota affect the expression of tight junction proteins and inflammatory cytokines, which leads to increased gut permeability and inflammation").

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²⁸ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose,
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²⁸ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose,
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²⁸ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose,
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²⁹ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose,
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²⁰ Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose,
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²¹ Kavanagh et al., 2013; Lambertz et al., 2017; Spruss et al., 2012).").

²⁹ Young-Eun Cho, et al., "Fructose Promotes Leaky Gut, Endotoxemia, and Liver Fibrosis
Through Ethanol-Inducible Cytochrome P450-2E1–Mediated Oxidative and Nitrative
Stress," Hepatology, Vol. 73, Issue 6, June 2021, 2180-2195 (April 8, 2019) ("fructose intake
causes protein nitration of intestinal [tight-junction] and AJ proteins, resulting in increased
gut leakiness, endotoxemia, and steatohepatitis with liver fibrosis").

²⁶ ³⁰ Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and
 ²⁷ Metabolic Disorders, *supra* n.12.

28 $||^{31}$ Id.

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homeostatic epithelial integrity, leading to abnormal influx of immune-stimulatory microbial
products and a propensity for systemic spread of enteric pathogens."³² This happens, at least
in part, because "hyperglycemia causes retrograde transport of glucose into intestinal
epithelial cells via GLUT2, followed by alterations in intracellular glucose metabolism and
transcriptional reprogramming."³³

40. In short, "experiments establish hyperglycemia as a direct and specific cause for
intestinal barrier dysfunction and susceptibility to enteric infection,"³⁴ such that "[b]lood
glucose concentrations are associated with microbial product influx in humans[.]"³⁵

9 III. SCIENTIFIC EVIDENCE DEMONSTRATES THAT CONSUMING JUICE, 10 LIKE NEXTFOOD'S JUICEDRINKS, HARMS OVERALL HEALTH

41. In addition to harming the digestive track directly, because sugar consumption
negatively impacts the gut microbiota composition and harms the gut barrier (which causes
inflammation), it can also increase risk of "more systemic diseases such as obesity, type 1
diabetes and type 2 diabetes."³⁶

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A. Juice Consumption is Associated with Increased Risk of Metabolic Disease

42. Excess sugar consumption leads to metabolic syndrome by stressing and
damaging crucial organs, including the pancreas and liver. When the pancreas, which
produces insulin, becomes overworked, it can fail to regulate blood sugar properly. Large
doses of fructose can overwhelm the liver, which metabolizes fructose. In the process, the

- 23 $\|_{33}$ Id.
 - $||^{34}$ Id.

28 $||^{36}$ De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8.

³² Thaiss, C., et al., "Hyperglycemia drives intestinal barrier dysfunction and risk for enteric infection," Science 359, 1376–1383 (2018) (March 23, 2018) ("We have identified glucose as an orchestrator of intestinal barrier function.").

³⁵ *Id.* (Human studies "suggest that similar to their effects in mice, serum glucose concentrations, rather than obesity, may associate with or potentially even drive intestinal barrier dysfunction in humans.").

liver will convert excess fructose to fat, which is stored in the liver and released into the
 bloodstream. This process contributes to key elements of metabolic syndrome, including high
 blood fats and triglycerides, high cholesterol, high blood pressure, and extra body fat,
 especially in the belly.³⁷

43. Metabolic disease has been linked to type 2 diabetes, cardiovascular disease,
obesity, polycystic ovary syndrome, nonalcoholic fatty liver disease, and chronic kidney
disease, and is defined as the presence of any three of the following:

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a. Large Waist Size (35" or more for women, 40" or more for men);

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- b. High triglycerides (150mg/dL or higher, or use of cholesterol medication);
- c. High total cholesterol, or HDL levels under 50mg/dL for women, and 40 mg for men;
- 13 d. High blood pressure (135/85 mm or higher); or
- 14

e. High blood sugar (100mg/dL or higher).

44. More generally, "metabolic abnormalities that are typical of the so-called
metabolic syndrome . . . includ[e] insulin resistance, impaired glucose tolerance, high
concentrations of circulating triacylglycerols, low concentrations of HDLs, and high
concentrations of small, dense LDLs."³⁸

19 45. Fifty-six million Americans have metabolic syndrome, or about 22.9% over the
20 age of 20, placing them at higher risk for chronic disease.

46. In 2010, Harvard researchers published a meta-analysis of three studies,
involving 19,431 participants, concerning the effect of consuming sugar-sweetened

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 ²⁴ ³⁷ Te Morenga, L., et al., "Dietary sugars and body weight: systematic review and metaanalyses of randomized controlled trials and cohort studies," *BJM* (January 2013) [hereinafter, "Te Morenga, Dietary Sugars & Body Weight"].

³⁸ Fried, S.K., "Sugars, hypertriglyceridemia, and cardiovascular disease," *American Journal of Clinical Nutrition*, Vol. 78 (suppl.), 873S-80S, at 873S (2003) [hereinafter, "Fried, Hypertriglyceridemia"].

beverages on risk for metabolic syndrome. They found participants in the highest quantile of
 1-2 servings per day³⁹ had an average 20% greater risk of developing metabolic syndrome
 than did those in the lowest quantile of less than 1 serving per day, showing "a clear link
 between SSB consumption and risk of metabolic syndrome "⁴⁰

5 47. Researchers who studied the incidence of metabolic syndrome and its 6 components in relation to soft drink consumption in more than 6,000 participants in the 7 Framingham Heart Study found that individuals who consumed 1 or more soft drinks per day 8 (i.e., 140-150 calories and 35-37.5 grams of sugar or more) had a 48% higher prevalence of 9 metabolic syndrome than infrequent consumers, those who drank less than 1 soft drink per 10 day. In addition, the frequent-consumer group had a 44% higher risk of developing metabolic 11 syndrome.⁴¹

B. Juice Consumption is Associated with Increased Risk of Type 2 Diabetes

48. Diabetes affects 25.8 million Americans, and can cause kidney failure, lowerlimb amputation, and blindness. In addition, diabetes doubles the risk of colon and pancreatic
cancers and is strongly associated with coronary artery disease and Alzheimer's disease.⁴²

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¹⁹⁴⁰ Malik, Vasanti S., et al., "Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes," *Diabetes Care*, Vol. 33, No. 11, 2477-83, at 2477, 2480-81 (November 2010) [hereinafter "Malik, 2010 Meta-Analysis"].

 ⁴¹ Dhingra, R., et al., "Soft Drink Consumption and Risk of Developing Cardiometabolic Risk
 Factors and the Metabolic Syndrome in Middle-Aged Adults in the Community," *Circulation*, Vol. 116, 480-88 (2007) [hereinafter "Dhingra, Cardiometabolic Risk"].

⁴² Aranceta Bartrina, J. et al., "Association between sucrose intake and cancer: a review of the evidence," *Nutrición Hospitalaria*, Vol. 28 (Suppl. 4), 95-105 (2013); Garcia-Jimenez, C., "A new link between diabetes and cancer: enhanced WNT/beta-catenin signaling by high glucose," *Journal of Molecular Endrocrinology*, Vol. 52, No. 1 (2014); Linden, G.J., "All-cause mortality and periodontitis in 60-70-year-old men: a prospective cohort study," *Journal of Clinical Periodontal*, Vol. 39, No. 1, 940-46 (October 2012).

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 ³⁹ Because 1 sugar-sweetened beverage typically has 140-150 calories and 35-37.5 grams of sugar per 12-ounce serving, this is equivalent to between 140 and 300 calories per day, and 35 to 75 grams of sugar per day.

49. In 2010, Harvard researchers also performed a meta-analysis of 8 studies
concerning sugar-sweetened beverage consumption and risk of type 2 diabetes, involving a
total of 310,819 participants. They concluded that individuals in the highest quantile of SSB
intake had an average 26% greater risk of developing type 2 diabetes than those in the lowest
quantile.⁴³ Moreover, "larger studies with longer durations of follow-up tended to show
stronger associations."⁴⁴ Thus, the meta-analysis showed "a clear link between SSB
consumption and risk of . . . type 2 diabetes."⁴⁵

50. An analysis of data for more than 50,000 women from the Nurses' Health Study,⁴⁶ during two 4-year periods (1991-1995, and 1995-1999), showed, after adjusting for confounding factors, that women who consumed 1 or more sugar-sweetened soft drink per day (*i.e.*, 140-150 calories and 35-37.5 grams of sugar), had an 83% greater relative risk of type 2 diabetes compared with those who consumed less than 1 such beverage per month, and women who consumed 1 or more fruit punch drinks per day had a 100% greater relative risk of type 2 diabetes.⁴⁷

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17 43 Malik, 2010 Meta-Analysis, *supra* n.40 at 2477, 2480.

 4^{44} *Id.* at 2481.

 $20 ||^{45} Id.$

⁴⁶ The Nurses' Health Study was established at Harvard in 1976, and the Nurses' Health Study
II, in 1989. Both are long-term epidemiological studies conducted on women's health. The
study followed 121,700 women registered nurses since 1976, and 116,000 female nurses
since 1989, to assess risk factors for cancer, diabetes, and cardiovascular disease. The Nurses'
Health Studies are among the largest investigations into risk factors for major chronic disease
in women ever conducted. *See generally* "The Nurses' Health Study," *at*http://www.channing.harvard.edu/nhs.

⁴⁷ Schulze, M.B., et al., "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type
27 Diabetes in Young and Middle-Aged Women," *Journal of the American Medical Association*, Vol. 292, No. 8, 927-34 (Aug. 25, 2004) [hereinafter "Schulze, Diabetes in Young & Middle-Aged Women"]. 51. The result of this analysis shows a statistically significant linear trend with increasing sugar consumption.⁴⁸

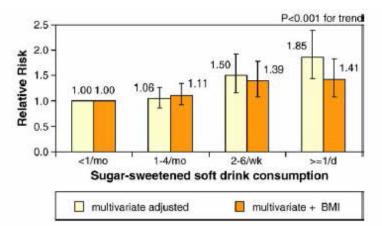


Fig. 4. Multivariate relative risks (RRs) of type 2 diabetes according to sugar-sweetened soft drink consumption in the Nurses' Health Study II 1991–1999 (Multivariate RRs were adjusted for age, alcohol (0, 0.1–4.9, 5.0–9.9, 10+ g/d), physical activity (quintiles), family history of diabetes, smoking (never, past, current), postmenopausal hormone use (never, ever), oral contraceptive use (never, past, current), intake (quintiles) of cereal fiber, magnesium, trans fat, polyunsaturated:saturated fat, and consumption of sugar-sweetened soft drinks, diet soft drinks, fruit juice, and fruit punch (other than the main exposure, depending on model). The data were based on Ref. [50]).

14 52. A prospective cohort study of more than 43,000 African American women
15 between 1995 and 2001 showed that the incidence of type 2 diabetes was higher with higher
16 intake of both sugar-sweetened soft drinks and fruit drinks. After adjusting for confounding
17 variables, those who drank 2 or more soft drinks per day (*i.e.*, 140-300 calories and 35-75
18 grams of sugar) showed a 24% greater risk of type 2 diabetes, and those who drank 2 or more
19 fruit drinks per day showed a 31% greater risk of type 2 diabetes, than those who drank 1 or
20 less such drinks per month.⁴⁹

S3. A large cohort study of 71,346 women from the Nurses' Health Study followed
for 18 years showed that those who consumed 2 to 3 apple, grapefruit, and orange juices per
day (280-450 calories and 75-112.5 grams of sugar) had an 18% greater risk of type 2 diabetes

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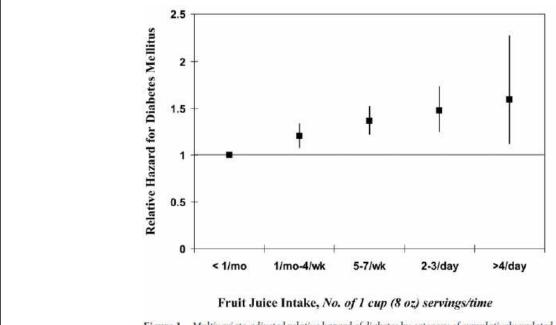
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 ⁴⁸ Hu, F.B., et al., "Sugar-sweetened beverages and risk of obesity and type 2 diabetes:
 ²⁶ Epidemioligic evidence," *Physiology & Behavior*, Vol. 100, 47-54 (2010).

⁴⁹ Palmer, J.R., et al., "Sugar-Sweetened Beverages and Incidence of Type 2 Diabetes Mellitus in African American Women," *Archive of internal Medicine*, Vol. 168, No. 14, 1487-82 (July 28, 2008) [hereinafter "Palmer, Diabetes in African American Women"].

than women who consumed less than 1 sugar-sweetened beverage per month. The data also showed a linear trend with increased consumption, as demonstrated below.⁵⁰



54. An analysis of more than 40,000 men from the Health Professionals Follow-Up Study, a prospective cohort study conducted over a 20-year period, found that, after adjusting for age and a wide variety of other confounders, those in the top quartile of sugar-sweetened beverage intake had a 24% greater risk of type 2 diabetes than those in the bottom quartile, while consumption of artificially-sweetened beverages, after adjustment, showed no association.⁵¹

55. In an analysis of tens of thousands of subjects from three prospective
longitudinal cohort studies (the Nurses' Health Study, Nurses' Health Study II, and Health
Professionals Follow-up Study), researchers found, after adjusting for BMI, initial diet,

Figure 1—Multivariate-adjusted relative hazard of diabetes by category of cumulatively updated fruit juice intake. Values were adjusted for cumulatively updated BMI, physical activity, family history of diabetes, postmenopausal hormone use, alcohol use, smoking, and total energy intake. For an increase of 1 serving/day of fruit juice, the multivariate-adjusted relative risk was 1.18 (95% CI 1.10–1.26; P < 0.0001).

⁵⁰ Bazzano, L.A., et al., "Intake of fruit, vegetables, and fruit juices and risk of diabetes in women," *Diabetes Care*, Vol. 31, 1311-17 (2008).

⁵¹ de Konig, L., et al., "Sugar-sweetened and artificially sweetened beverage consumption and risk of type 2 diabetes in men," *American Journal of Clinical Nutrition*, Vol. 93, 1321-27 (2011).

changes in diet, and lifestyle covariates, that increasing sugary beverage intake—which included both sugar-sweetened beverages and fruit juice—by half-a-serving per day over a 4-year period was associated with a 16% greater risk of type 2 diabetes.⁵²

In another study of subjects from the Nurses' Health Study, Nurses' Health 56. 4 Study II, and Health Professionals Follow-up Study, researchers set out to "determine 5 whether individual fruits are differentially associated with risk of type 2 diabetes," looking at 6 the associated risk with eating three servings per week of blueberries, grapes and raisins, 7 8 prunes, apples and pears, bananas, grapefruit, oranges, strawberries, cantaloupe, and peaches, plums and apricots, as well as "the same increment" in fruit juice consumption. They found 9 that "[g]reater consumption of specific whole fruits" was "significantly associated with a 10 lower risk of type 2 diabetes, whereas greater consumption of fruit juice is associated with a 11 higher risk." The increased risk was approximately 8% based on three fruit juice servings per 12 week.⁵³ Similarly, a meta-analysis of 17 prospective cohort studies showed higher 13 consumption of fruit juice was associated with a 7% greater incidence of type 2 diabetes after 14 adjusting for adiposity.⁵⁴ 15

16 57. An econometric analysis of repeated cross-sectional data published in 2013
17 established a causal relationship between sugar availability and type 2 diabetes. After
18 adjusting for a wide range of confounding factors, researchers found that an increase of 150
19 calories per day related to an insignificant 0.1% rise in diabetes prevalence by country, while

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 ⁵² Drouin-Chatier, J., et al., "Changes in Consumption of Sugary Beverages and Artificially Sweetened Beverages and Subsequent Risk of Type 2 Diabetes: Results From Three Large Prospective U.S. Cohorts of Women and Men." *Diabetes Care*, Vol. 42, pp. 2181-89 (Dec. 2019).

 ⁵³ Muraki, I., et al., "Fruit consumption and risk of type 2 diabetes: results from three prospective longitudinal cohort studies." *BMJ* (Aug. 28, 2013).

⁵⁴ Imamura, F., et al., "Consumption of sugar sweetened beverages, artificially sweetened beverages, and fruit juice and incidence of type 2 diabetes: systematic review, meta-analysis, and estimation of population attributable fraction." *BMJ*, Vol. 351 (2015).

an increase of 150 calories per day in sugar related to a 1.1% rise in diabetes prevalence by country, a statically-significant 11-fold difference.⁵⁵

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C. Juice Consumption is Associated with Increased Risk of Cardiovascular Heart Disease

5 58. Heart disease is the number one killer in the United States. The scientific
6 literature demonstrates that consumption of sugar-containing beverages (SCB), including
7 juices, at amounts typically consumed, has deleterious effects on heart health.

8 59. In a study published in January 2020, researchers set out to determine whether consumption of SCBs, including juice, is associated with cardiometabolic risk (CMR) in 9 preschool children, using 2007-2018 data from TARGet Kids!, a primary-care, practice-based 10 research network in Canada. After adjusting for sociodemographic, familial, and child-related 11 12 covariates, higher consumption of SCB was significantly associated with elevated CMR scores, including lower HDL "good" cholesterol, and higher triglycerides. In addition, when 13 examined separately, juice specifically was significantly associated with lower HDL 14 cholesterol. The researchers stated that their "findings support recommendations to limit 15 overall intake of SCB in early childhood, in [an] effort to reduce the potential long-term 16 burden of CMR."56 17

18 60. But juice consumption does not just detrimentally affect children. Analyzing
19 data from the Danish Diet, Cancer and Health cohort study, representing 57,053 men and
20 women aged 50 to 64 years old, researchers found "a tendency towards a lower risk of ACS
21 [acute coronary syndrome] . . . for both men and women with higher [whole] fruit and

⁵⁵ Basu, S., et al., "The Relationship of Sugar to Population-Level Diabetes Prevelance: An Econometric Analysis of Repeated Cross-Sectional Data," *PLOS Online*, Vol. 8, Issue 2 (February 27, 2013).

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⁵⁶ Eny, KM, et al., "Sugar-containing beverage consumption and cardiometabolic risk in preschool children." *Prev. Med. Reports* 17 (Jan. 14, 2020).

vegetable consumption," but "a higher risk . . . among women with higher fruit juice intake[.]"⁵⁷

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61. In one study, those who consumed juice daily, rather than rarely or occasionally,
had significantly higher central systolic blood pressure, a risk factor for cardiovascular
disease, even after adjusting for age, height, weight, mean arterial pressure, heart rate, and
treatment for lipids and hypertension.⁵⁸

62. Studies of the cardiovascular effects of added sugar consumption further suggest
juice consumption causes increased risk for and contraction of cardiovascular disease, since
the free sugars in juice act physiologically identically to added sugars, such as those in sugarsweetened beverages.

63. 11 For example, data obtained from NHANES surveys during the periods of 1988-12 1994, 1999-2004, and 2005-2010-after adjusting for a wide variety of other factorsdemonstrate that those who consumed 10% - 24.9% of their calories from added sugar had a 13 30% greater risk of cardiovascular disease (CVD) mortality than those who consumed 5% or 14 less of their calories from added sugar. In addition, those who consumed 25% or more of their 15 calories from added sugar had an average 275% greater risk of CVD mortality than those who 16 consumed less than 5% of calories from added sugar. Similarly, when compared to those who 17 consumed approximately 8% of calories from added sugar, participants who consumed 18 approximately 17% - 21% (the 4th quintile) of calories from added sugar had a 38% higher 19 risk of CVD mortality, while the relative risk was more than double for those who consumed 20 21% or more of calories from added sugar (the 5th quintile). Thus, "[t]he risk of CVD 21

- ⁵⁷ Hansen, L., et al., "Fruit and vegetable intake and risk of acute coronary syndrome." *British J. of Nutr.*, Vol. 104, p. 248-55 (2010).
- ²⁷
 ⁵⁸ Pase, M.P., et al., "Habitual intake of fruit juice predicts central blood pressure." *Appetite*,
 ²⁸ Vol. 84, p. 658-72 (2015).

mortality increased exponentially with increasing usual percentage of calories from added sugar," as demonstrated in the chart below.⁵⁹

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3 The NHANES analysis also found "a significant association between sugar-64. sweetened beverage consumption and risk of CVD mortality," with an average 29% greater 4 risk of CVD mortality "when comparing participants who consumed 7 or more servings/wk 5 (360 mL per serving) with those who consumed 1 serving/wk or less "⁶⁰ The study 6 concluded that "most US adults consume more added sugar than is recommended for a 7 8 healthy diet. A higher percentage of calories from added sugar is associated with significantly increased risk of CVD mortality. In addition, regular consumption of sugar-sweetened 9 beverages is associated with elevated CVD mortality."61 10

Data from the Nurses' Health Study consistently showed that, after adjusting for 11 65. 12 other unhealthy lifestyle factors, those who consumed two or more sugar-sweetened beverages per day (280 calories, or 70 grams of sugar or more) had a 35% greater risk of 13 coronary heart disease compared with infrequent consumers.⁶² 14

In another prospective cohort study, it was suggested that reducing sugar 15 66. 16 consumption in liquids is highly recommended to prevent CHD. Consumption of sugary beverages was significantly shown to increase risk of CHD, as well as adverse changes in 17 some blood lipids, inflammatory factors, and leptin.63 18

⁵⁹ Yang, Quanhe, et al., "Added Sugar Intake and Cardiovascular Diseases Mortality Among US Adults," JAMA, at E4-5 (pub. online, Feb. 3, 2014).

⁶⁰ *Id.* at E6.

⁶¹ *Id.* at E8.

⁶² Fung, T.T., et al., "Sweetened beverage consumption and risk of coronary heart disease in women." Am. J. of Clin. Nutr., Vol. 89, pp. 1037-42 (Feb. 2009).

⁶³ Koning, L.D., et al., "Sweetened Beverage Consumption, Incident Coronary Heart Disease, and Biomarkers of Risk in Men," Circulation, Vol. 125, pp. 1735-41 (2012).

G7. Juice consumption is also associated with several CHD risk factors. For
 example, consumption of sugary beverages like juice has been associated with
 dyslipidemia,⁶⁴ obesity,⁶⁵ and increased blood pressure.⁶⁶

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D. Juice Consumption is Associated with Increased Risk of Obesity

68. Excess sugar consumption also leads to weight gain and obesity because insulin 5 6 secreted in response to sugar intake instructs the cells to store excess energy as fat. This excess weight can then exacerbate the problems of excess sugar consumption, because excess 7 8 fat, particularly around the waist, is in itself a primary cause of insulin resistance, another vicious cycle. Studies have shown that belly fat produces hormones and other substances that 9 can cause insulin resistance, high blood pressure, abnormal cholesterol levels, and 10 cardiovascular disease. And belly fat plays a part in the development of chronic inflammation 11 12 in the body, which can cause damage over time without any signs or symptoms. Complex interactions in fat tissue draw immune cells to the area, which triggers low-level chronic 13 inflammation. This in turn contributes even more to insulin resistance, type 2 diabetes, and 14 15 cardiovascular disease.

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⁶⁴ Elliott S.S., et al., "Fructose, weight gain, and the insulin resistance syndrome." *Am. J. Clin. Nutr.*, Vol. 76, No. 5, pp. 911-22 (2002).

¹⁹ ⁶⁵ Faith, M.S., et al., "Fruit Juice Intake Predicts Increased Adiposity Gain in Children From 20 Low-Income Families: Weight Status-by-Environment Interaction." Pediatrics, Vol. 118 (2006) ("Among children who were initially either at risk for overweight or overweight, 21 increased fruit juice intake was associated with excess adiposity gain, whereas parental 22 offerings of whole fruits were associated with reduced adiposity gain."); Schulze, M.B, et al., "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and 23 Middle-Aged Women." JAMA, Vol. 292, No. 8, pp. 927-34 (2004); Ludwig, D.S., et al., 24 "Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis." Lancet, Vol. 257, pp. 505-508 (2001); Dennison, B.A., 25 et al., "Excess fruit juice consumption by preschool-aged children is associated with short 26 stature and obesity." Pediatrics, Vol. 99, pp. 15-22 (1997).

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⁶⁶ Hoare, E., et al., "Sugar- and Intense-Sweetened Drinks in Australia: A Systematic Review
on Cardiometabolic Risk." *Nutrients*, Vol. 9, No. 10 (2017).

69. Based on a meta-analysis of 30 studies between 1966 and 2005, Harvard
researchers found "strong evidence for the independent role of the intake of sugar-sweetened
beverages, particularly soda, in the promotion of weight gain and obesity in children and
adolescents. Findings from prospective cohort studies conducted in adults, taken in
conjunction with results from short-term feeding trials, also support a positive association
between soda consumption and weight gain, obesity, or both."⁶⁷

7 70. A recent meta-analysis by Harvard researchers evaluating change in Body Mass
8 Index per increase in 1 serving of sugar-sweetened beverages per day found a significant
9 positive association between beverage intake and weight gain.⁶⁸

- 10 71. One study of more than 2,000 2.5-year-old children followed for 3 years found
 11 that those who regularly consumed sugar-sweetened beverages between meals had a 240%
 12 better chance of being overweight than non-consumers.⁶⁹
- 13 72. An analysis of data for more than 50,000 women from the Nurses' Health Study
 14 during two 4-year periods showed that weight gain over a 4-year period was highest among
 15 women who increased their sugar-sweetened beverage consumption from 1 or fewer drinks
 16 per week, to 1 or more drinks per day (8.0 kg gain during the 2 periods), and smallest among
 17 women who decreased their consumption or maintained a low intake level (2.8 kg gain).⁷⁰
- 73. A study of more than 40,000 African American women over 10 years had similar
 results. After adjusting for confounding factors, those who increased sugar-sweetened

- ⁶⁸ Malik, V.S., et al., "Sugar-sweetened beverages and BMI in children and adolescents:
 reanalyses of a meta-analysis," *American Journal of Clinical Nutrition*, Vol. 29, 438-39 (2009).
- ⁶⁹ Dubois, L., et al., "Regular sugar-sweetened beverage consumption between meals
 ⁶⁹ Increases risk of overweight among preschool-aged children," *Journal of the American Dietetic Association*, Vol. 107, Issue 6, 924-34 (2007).
- 28 ⁷⁰ Schulze, Diabetes in Young & Middle-Aged Women, *supra* n.47.

²¹ ⁶⁷ Malik, V.S., et al., "Intake of sugar-sweetened beverages and weight gain: a systematic
²² review," *American Journal of Clinical Nutrition*, Vol. 84, 274-88 (2006).

beverage intake from less than 1 serving per week, to more than 1 serving per day, gained the most weight (6.8 kg), while women who decreased their intake gained the least (4.1 kg).⁷¹

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74. Experimental short-term feeding studies comparing sugar-sweetened beverages
to artificially-sweetened beverages have illustrated that consumption of the former leads to
greater weight gain. As demonstrated in the chart below, one 10-week trial involving more
than 40 men and women demonstrated that the group that consumed daily supplements of
sucrose (for 28% of total energy) increased body weight and fat mass, by 1.6 kg for men and
1.3 kg for women, while the group that was supplemented with artificial sweeteners lost
weight—1.0 kg for men and 0.3 kg for women.⁷²

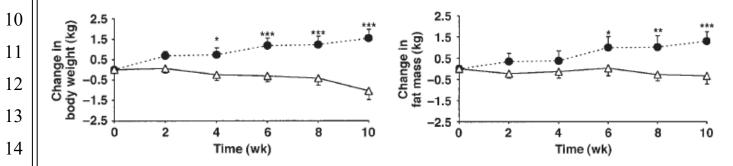


FIGURE 2. Mean (\pm SEM) changes in body weight, fat mass, and fatfree mass during an intervention in which overweight subjects consumed supplements containing either sucrose (\odot ; n = 21) or artificial sweeteners (\triangle ; n = 20) daily for 10 wk. The diet × time interactions were significant for changes in body weight (P < 0.0001) and fat mass (P < 0.05) by analysis of variance with Tukey's post hoc tests. At specific time points for changes in body weight and fat mass, there were significant differences between the sucrose and sweetener groups: "P < 0.05, "P < 0.001, and ""P < 0.0001 (general linear model with least squares means and adjustment for multiple comparisons).

25 $||^{71}$ Palmer, Diabetes in African American Women, *supra* n.49.

⁷² Raben, A., et al., "Sucrose compared with artificial sweeteners: different effects on ad
¹⁷ libitum food intake and body weight after 10 wk of supplementation in overweight subjects," *American Journal of Clinical Nutrition*, Vol. 76, 721-29 (2002) [hereinafter, "Raben, Sucrose
²⁸ vs. Artificial Sweeteners"].

E. Juice Consumption is Associated with Increased Risk of Liver Disease

75. Sugar consumption causes serious liver disease, including non-alcoholic fatty
liver disease (NAFLD), characterized by excess fat build-up in the liver. Five percent of these
cases develop into non-alcoholic steatohepatitis (NASH), scarring as the liver tries to heal its
injuries, which gradually cuts off vital blood flow to the liver. About 25% of NASH patients
progress to non-alcoholic liver cirrhosis, which requires a liver transplant or can lead to
death.⁷³

8 76. Since 1980, the incidence of NAFLD and NASH has doubled, along with the 9 rise of fructose consumption, with approximately 6 million Americans estimated to have 10 progressed to NASH and 600,000 to Nash-related cirrhosis. Most people with NASH also 11 have type 2 diabetes. NASH is now the third-leading reason for liver transplant in America.⁷⁴

12 77. Moreover, because the liver metabolizes sugar virtually identically to alcohol,
13 the U.S. is now seeing for the first time alcohol-related diseases in children. Conservative
14 estimates are that 31% of American adults, and 13% of American children suffer from
15 NAFLD.⁷⁵

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⁷³ Farrell, G.C., et al., "Nonalcoholic fatty liver disease: from steatosis to cirrhosis," *Hepatology*, Vol. 433, No. 2 (Suppl. 1), S99-S112 (February 2006); Powell, E.E., et al., "The Natural History of Nonalcoholic Steatohepatitis: A Follow-up Study of Forty-two Patients for Up to 21 Years," *Hepatology*, Vol. 11, No. 1 (1990).

 ⁷⁴ Charlton, M.R., et al., "Frequency and outcomes of liver transplantation for nonalcoholic steatohepatitis in the United States," *Gastroenterology*, Vol. 141, No. 4, 1249-53 (October 2011).

⁷⁵ Lindback, S.M., et al., "Pediatric Nonalcoholic Fatty Liver Disease: A Comprehensive Review," *Advances in Pediatrics*, Vol. 57, No. 1, 85-140 (2010); Lazo, M. et al., "The Epidemiology of Nonalcoholic Fatty Liver Disease: A Global Perspective," *Seminars in Liver Disease*, Vol. 28, No. 4, 339-50 (2008); Schwimmer, J.B., et al., "Prevalence of Fatty Liver in Children and Adolescents," *Pediatrics*, Vol. 118, No. 4, 1388-93 (2006); Browning, J.D.,

et al., "Prevalence of hepatic steatosis in an urban population in the United States: Impact of ethnicity," *Hepatology*, Vol. 40, No. 6, 1387-95 (2004).

F. Juice Consumption is Associated with Increased Risk of High Blood Triglycerides and Abnormal Cholesterol Levels

3 78. Cholesterol is a waxy, fat-like substance found in the body's cells, used to make hormones, bile acids, vitamin D, and other substances. The human body manufactures all the 4 cholesterol it requires, which circulates in the bloodstream in packages called lipoproteins. 5 Excess cholesterol in the bloodstream can become trapped in artery walls, building into 6 plaque and narrowing blood vessels, making them less flexible, a condition called 7 8 atherosclerosis. When this happens in the coronary arteries, it restricts oxygen and nutrients to the heart, causing chest pain or angina. When cholesterol-rich plaques in these arteries 9 burst, a clot can form, blocking blood flow and causing a heart attack. 10

11 79. Most blood cholesterol is low-density lipoprotein, or LDL cholesterol, which is 12 sometimes called "bad" cholesterol because it carries cholesterol to the body's tissues and 13 arteries, increasing the risk of heart disease. High-density lipoprotein, or HDL cholesterol, is 14 sometimes called "good" cholesterol because it removes excess cholesterol from the 15 cardiovascular system, bringing it to the liver for removal. Thus, a low level of HDL 16 cholesterol increases the risk of heart disease.

17 80. Diet affects blood cholesterol. For example, the body reacts to saturated fat by
18 producing LDL cholesterol.

19 81. When the liver is overwhelmed by large doses of fructose, it will convert excess
20 to fat, which is stored in the liver and then released into the bloodstream, contributing to key
21 elements of metabolic syndrome, like high blood fat and triglycerides, high total cholesterol,
22 and low HDL "good" cholesterol.⁷⁶

23 82. A study of more than 6,000 participants in the Framingham Heart Study found
24 those who consumed more than 1 soft drink per day had a 25% greater risk of
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^{28 &}lt;sup>76</sup> Te Morenga, Dietary Sugars & Body Weight, *supra* n.37.

hypertriglyceridemia, and 32% greater risk of low HDL cholesterol than those who consumed less than 1 soft drink per day.⁷⁷

83. A systematic review and meta-analysis of 37 randomized controlled trials
concerning the link between sugar intake and blood pressure and lipids found that higher
sugar intakes, compared to lower sugar intakes, significantly raised triglyceride
concentrations, total cholesterol, and low density lipoprotein cholesterol.⁷⁸

A cross-sectional study among more than 6,100 U.S. adults from the NHANES 7 84. 1999-2006 data were grouped into quintiles for sugar intake as follows: (1) less than 5% of 8 calories consumed from sugar, (2) 5% to less than 10%, (3) 10% to less than 17.5%, (4) 17.5% 9 to less than 25%, and (5) 25% or more. These groups had the following adjusted mean HDL 10 levels (because HDL is the "good" cholesterol, higher levels are better): 58.7 mg/dL, 57.5, 11 12 53.7, 51.0, and 47.7. Mean triglyceride levels were 105 mg/dL, 102, 111, 113, and 114. Mean LDL levels were 116 mg/dL, 115, 118, 121, and 123 among women, with no significant trend 13 among men. Consumers whose sugar intake accounted for more than 10% of calories had a 14 50% - 300% higher risk of low HDL levels compared to those who consumed less than 5% 15 of calories from sugar. Likewise, high-sugar consumers had greater risk of high triglycerides. 16 All relationships were linear as demonstrated in the charts below.⁷⁹ 17

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 $_{24} \parallel^{77}$ Dhingra, Cardiometabolic Risk, *supra* n.41.

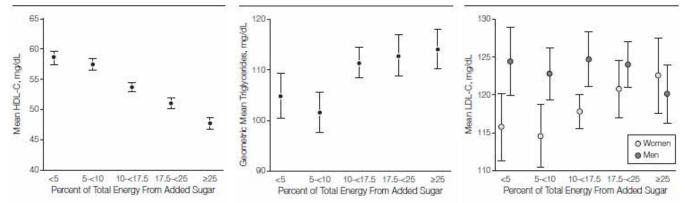
²⁷
⁷⁹ Welsh, J.A., et al., "Caloric Sweetener Consumption and Dyslipidemia Among US Adults,"
²⁸ *Journal of the American Medical Association*, Vol. 303, No. 15, 1490-97 (April 21, 2010).

 ⁷⁸ Te Morenga, L., et al., "Dietary sugars and cardiometabolic risk: systematic review and meta-analyses of randomized controlled trials on the effects on blood pressure and lipids," *American Journal of Clinical Nutrition*, Vol. 100, No. 1, 65-79 (May 7, 2014).

Figure 1. Multivariable-Adjusted Mean HDL-C Levels by Level of Added Sugar Intake Among US Adults, NHANES 1999-2006

Figure 2. Multivariable-Adjusted Geometric Mean Triglyceride Levels by Level of Added Sugar Intake Among US Adults, NHANES 1999-2006

Figure 3. Multivariable-Adjusted Mean LDL-C Levels by Level of Added Sugar Intake Among US Men and Women, NHANES 1999-2006



85. One experimental study showed that, when a 17% fructose diet was provided to healthy men, they showed an increase in plasma triacylglycerol concentrations of 32%.⁸⁰

86. Another 10-week experimental feeding study showed that those who were fed 25% of their energy requirements as fructose experienced increases in LDL cholesterol, small dense LDL cholesterol, and oxidized LDL cholesterol, as well as increased concentrations of triglycerides and total cholesterol, while those fed a 25% diet of glucose did not experience the same adverse effects.⁸¹

87. In a cross-sectional study of normal weight and overweight children aged 6-14, researchers found that "the only dietary factor that was a significant predictor of LDL particle size was total fructose intake."⁸²

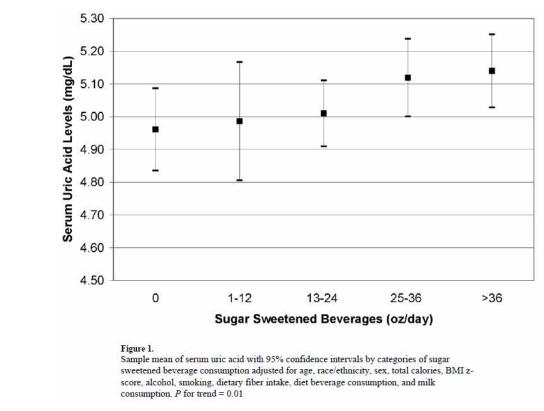
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⁸² Aeberli, I., et al., "Fructose intake is a predictor of LDL particle size in overweight schoolchildren," *American Journal of Clinical Nutrition*, Vol. 86, 1174-78 (2007).

³⁸⁰ Bantle, J.P., et al., "Effects of dietary fructose on plasma lipids in healthy subjects," *American Journal of Clinical Nutrition*, Vol. 72, 1128-34 (2000).

 ⁸¹ Stanhope, K.L., et al., "Consuming fructose-sweetened, not glucose-sweetened, beverages increases visceral adiposity and lipids and decreases insulin sensitivity in overweight/obese humans," *The Journal of Clinical Investigation*, Vol. 119, No. 5, 1322-34 (May 2009).

G. Juice Consumption is Associated with Increased Risk of Hypertension

88. An analysis of the NHANES data for more than 4,800 adolescents also showed a positive, linear association between sugar-sweetened beverages and higher systolic blood pressure, as well as corresponding increases in serum uric acid levels.⁸³

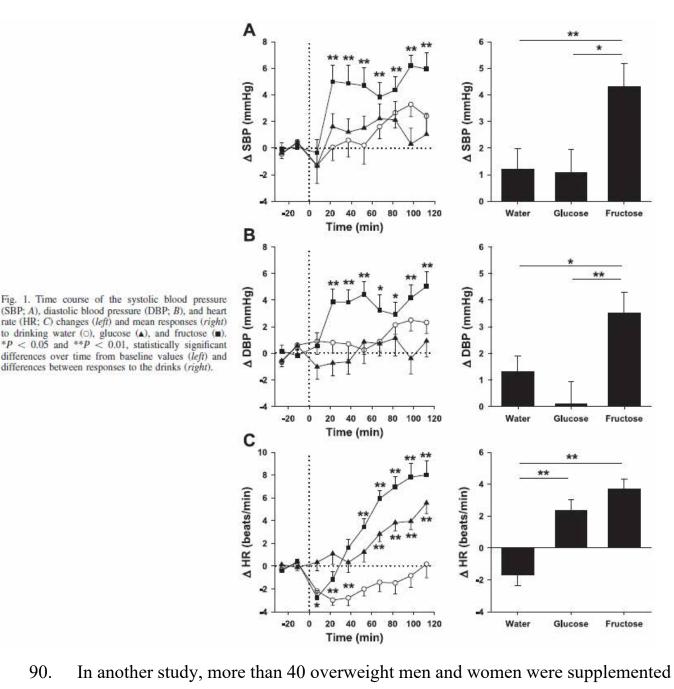


89. In one study, 15 healthy men drank 500 ml water containing either no sugar, 60 grams of fructose, or 60 grams of glucose. Blood pressure, metabolic rate, and autonomic nervous system activity were measured for 2 hours. While the administration of fructose was associated with an increase in both systolic and diastolic blood pressure, blood pressure did not rise in response to either water or glucose ingestion, as demonstrated in the chart below.⁸⁴

⁸³ Nguyen, S., et al., "Sugar Sweetened Beverages, Serum Uric Acid, and Blood Pressure in Adolescents," *Journal of Pediatrics*, Vol. 154, No. 6, 807-13 (June 2009).

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⁸⁴ Brown, C.M., et al., "Fructose ingestion acutely elevates blood pressure in healthy young humans," *Am. J. Physiol. Regul. Integr. Compl. Physiol.*, Vol. 294, R730-37 (2008).

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90. In another study, more than 40 overweight men and women were supplemented for 10 weeks with either sucrose or artificial sweeteners. The sucrose group saw an increase in systolic and diastolic blood pressure, of 3.8 and 4.1 mm Hg, respectively, while the artificial sweetener group saw a decrease in systolic and diastolic blood pressure, of 3.1 and 1.2 mm Hg, respectively.⁸⁵

^{28 85} Raben, Sucrose vs. Artificial Sweeteners, *supra* n.72.

191. Another study took a variety of approaches to measuring the association between2sugar intake and blood pressure, concluding that an increase of 1 serving of sugar-sweetened3beverages per day (*i.e.*, 140-150 calories, and 35-37.5 grams of sugar) was associated with4systolic/diastolic blood pressure differences of +1.6 and +0.8 mm Hg (and +1.1/+0.4 mm Hg5with adjustment for height and weight), while an increase of 2 servings results in6systolic/diastolic blood pressure differences of +3.4/+2.2, demonstrating that the relationship7is direct and linear.⁸⁶

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H. Juice Consumption is Associated with Increased All-Cause Mortality

In a cohort study of 13,440 black and white adults 45 years and older, observed 9 92. for a mean of 6 years, each additional 12-oz serving per day of fruit juice was associated with 10 a 24% higher all-cause mortality risk. This was significantly higher than the increased risk 11 12 associated with all sugary beverages, including sugar-sweetened beverages like soda, which was 11% for each additional 12-oz serving per day. The researchers from Emory University, 13 University of Alabama, and the Weill Cornell Medical College concluded their findings 14 "suggest that consumption of sugary beverages, including fruit juices, is associated with all-15 cause mortality."⁸⁷ 16

IV. Because of the Compelling Evidence that Consuming Juice is Unhealthy, Authoritative Bodies Recommend Limiting its Consumption

19 93. The American Academy of Pediatrics (AAP) suggests limiting juice
20 consumption to no more than 4 to 6 ounces for young children aged 1 to 6,⁸⁸ and no more

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⁸⁶ Brown, I.J., et al., "Sugar-Sweetened Beverage, Sugar Intake of Individuals, and Their
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⁸⁰ Blood Pressure: International Study of Macro/Micronutrients and Blood Pressure,"
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⁸⁷ Collin, L.J., et al., "Association of Sugary Beverage Consumption With Mortality Risk in US Adults: A Secondary Analysis of Data From the REGARDS Study," *JAMA Network Open* Vol. 2, No. 5 (May 2019).

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⁸⁸ Am. Academy of Pediatrics, "Healthy Children, Fit Children: Answers to Common Questions From Parents About Nutrition and Fitness." (2011).

than 8 fluid ounces for children 7 to 18 years of age, as well as adults.⁸⁹ In addition, both the
 AAP and Dietary Guidelines for Americans recommend that children consume whole fruit in
 place of juice.⁹⁰

94. The most recent Dietary Guidelines for Americans states that "[t]he amounts of
fruit juice allowed in the USDA Food Patterns for young children align with the
recommendation from the American Academy of Pediatrics that young children consume no
more than 4 to 6 fluid ounces of 100% fruit juice per day."⁹¹

8 95. The World Health Organization recommends that no more than 10% of an
9 adult's calories, and ideally less than 5%, come from free or added sugar, or from natural
10 sugars in honey, syrups, and fruit juice.

11V.NEXTFOODS' REPRESENTATIONS AND OMISSIONS SUGGESTING THE12JUICEDRINKS ARE HEALTHY ARE FALSE AND MISLEADING

13 96. For more than four years preceding the filing of this Complaint and continuing
14 today, NextFoods has sold and continues to sell the JuiceDrinks on a nationwide basis,
15 including in California, in at least 32 ounce and 15.2 ounce sizes, and in various flavors.

16 97. The JuiceDrinks' standard serving size is 8 fl. oz (1 cup).⁹² Each serving,
17 depending on flavor, contains between 9g and 21g of free sugar, contributing 60% to 88% of
18 its calories.

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⁹¹ U.S. Dep't of Health & Human Servs. and U.S. Dept. of Agric., "Dietary Guidelines for Americans 2015 – 2020," at 22 (8th ed.), available at https://health.gov/sites/default/files/2019-09/2015-2020_Dietary_Guidelines.pdf.

⁹² This is also the FDA-promulgated Reference Amount Customarily Consumed (RACC) for
 ⁹² This is also the FDA-promulgated Reference Amount Customarily Consumed (RACC) for
 ⁹² This is also the FDA-promulgated Reference Amount Customarily Consumed (RACC) for
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 ⁹⁵ Diversity Consumed (RACC) for

^{20 &}lt;sup>89</sup> Heyman, M.B., et al., "Fruit Juice in Infants, Children, and Adolescents: Current 21 Recommendations." *Pediatrics* Vol. 139, No. 6 (June 2017).

⁹⁰ *Id.*; *see also* Auerbach, B.J., et al., "Review of 100% Fruit Juice and Chronic Health Conditions: Implications for Sugar-Sweetened Beverage Policy." *Adv. Nutr.*, Vol. 9, pp. 78-85 (2018).

98. Because scientific evidence demonstrates that consuming foods high in free sugar content, like the JuiceDrinks, harms digestive health, NextFoods' representations that the JuiceDrinks promote digestive or gut health are false, or at least highly misleading.

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99. To the extent the JuiceDrinks probiotics may provide some benefits to "digestive
health"—like the mitigation of "Flatulence," "Diarrhea," and "Constipation," as set out on
the JuiceDrinks' labels, it is nevertheless deceptive for NextFoods to advertise the products
as promoting digestive health since regular consumption of the JuiceDrinks actually is likely
to detriment digestive health.

9 100. Because scientific evidence demonstrates that, due to its high free sugar content,
10 juice consumption is associated with increased risk of metabolic disease, cardiovascular
11 disease, type 2 diabetes, liver disease, obesity, high blood triglycerides and cholesterol,
12 hypertension, and all-cause mortality, NextFoods' representations that the JuiceDrinks
13 promote "overall health" and "GoodHealth," are healthy, are false, or at least highly
14 misleading.

15 101. While representing that the JuiceDrinks promote digestive health, NextFoods regularly and intentionally omits material information regarding the dangers of the free sugars 16 in the JuiceDrinks and the harm to digestive health that they cause. NextFoods is under a duty 17 to disclose this information to consumers because (a) NextFoods is revealing some 18 information about its Products-enough to suggest they are beneficial to digestive health-19 20 without revealing additional material information, (b) NextFoods deceptive omissions 21 concern human health, and specifically the detrimental digestive health consequences of consuming its Products, (c) NextFoods was in a superior position to know of the dangers 22 presented by the sugars in its juices, as it is a food company whose business depends upon 23 24 food science and policy, and (d) NextFoods actively concealed material facts not known to Plaintiff and the Class. 25

26 102. While representing that the JuiceDrinks promote "overall health" and
27 "GoodHealth," NextFoods regularly and intentionally omits material information regarding
28 the dangers of the free sugars in the JuiceDrinks. NextFoods is under a duty to disclose this

information to consumers because (a) NextFoods is revealing some information about its
Products—enough to suggest they are healthy or beneficial to health—without revealing
additional material information, (b) NextFoods deceptive omissions concern human health,
and specifically the detrimental health consequences of consuming its Products, (c)
NextFoods was in a superior position to know of the dangers presented by the sugars in its
juices, as it is a food company whose business depends upon food science and policy, and (d)
NextFoods actively concealed material facts not known to Plaintiff and the Class.

8 VI. THE JUICEDRINKS' LABELING VIOLATES CALIFORNIA AND FEDERAL 9 LAW

10 103. The JuiceDrinks and their challenged labeling statements violate California 11 Health and Safety Code §§109875, *et. seq.* (the "Sherman Law"), which has expressly 12 adopted the federal food labeling requirements as its own. *See e.g.*, *id.* § 110100, *id.* § 110670 13 ("Any food is misbranded if its labeling does not conform with the requirements for nutrition 14 labeling as set forth in Section 403(r) (21 U.S.C. Sec. 343(r)) of the federal act and the 15 regulation adopted pursuant thereto.").

16 104. First, the challenged claims are false and misleading for the reasons described
17 herein, in violation of 21 U.S.C. § 343(a), which deems misbranded any food whose "label is
18 false or misleading in any particular." NextFoods accordingly also violated California's
19 parallel provision of the Sherman Law. *See* Cal. Health & Safety Code § 110670.

20 105. Second, despite making the challenged claims, NextFoods "fail[ed] to reveal 21 facts that are material in light of other representations made or suggested by the statement[s], word[s], design[s], device[s], or any combination thereof," in violation of 21 C.F.R. § 22 1.21(a)(1). Such facts include the detrimental health consequences of consuming the 23 JuiceDrinks at typical levels, including (1) harm to the digestive system that can cause chronic 24 25 digestive track diseases such as ulcerative colitis, Crohn's disease, celiac disease and irritable bowel syndrome and (2) increased risk of other chronic diseases such as metabolic disease, 26 cardiovascular disease, type 2 diabetes, liver disease, obesity, high blood triglycerides and 27 28 cholesterol, hypertension, and death.

1 106. Third, NextFoods failed to reveal facts that were "[m]aterial with respect to the 2 consequences which may result from use of the article under" both "[t]he conditions 3 prescribed in such labeling," and "such conditions of use as are customary or usual," in 4 violation of § 1.21(a)(2). Namely, NextFoods failed to disclose the harm to the digestive 5 system that can cause chronic digestive track diseases and increased risk of other serious 6 chronic diseases that is likely to result from the usual consumption of the JuiceDrinks in the 7 customary and prescribed manners.

8 **VII.** PLAINTIFF'S PURCHASE, RELIANCE, AND INJURY

9 107. As best she can recall, Plaintiff started purchasing 32 oz. cartons of the
10 JuiceDrinks in 2018, and continued to purchase the products until around the middle of 2019.
11 She recalls making her purchases at local stores including the Sprouts Farmers Market, at
12 9361 Mission Gorge Road, Santee, California 92071, for approximately \$3 to \$5 per carton.

13 108. In purchasing the JuiceDrinks, Plaintiff was exposed to, read, and relied upon
14 NextFoods' labeling claims that were intended to appeal to consumers, like her, interested in
15 health and nutrition. Specifically, to the best of her recollection, when deciding to purchase
16 the JuiceDrinks, Plaintiff at various times read and relied on at least the following statements
17 on the products' packaging:

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a. "START YOUR GOODHEALTH GAME PLAN . . . Drink one 8 oz. glass of delicious GoodBelly a day for 12 days.";

b. "Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles the rest of you does too";

c. "WE DIG SCIENCE. LP299V is naturally occurring in the human gut. It has been studied more than 2 decades and has numerous research trials to show that it may help promote healthy digestion and overall wellness"; and

d. "GoodBelly Probiotics is a delicious blend of fruit juices and a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started – in your belly." 109. Plaintiff believed these claims regarding digestive health and overall health of,
 which were and are deceptive because they convey that the products promote digestive and
 overall health and will not detriment digestive or overall health, despite that they contain
 excessive amounts of free sugar, which harms digestive health and is likely to increase risk
 of other diseases when consumed regularly.

6 110. When purchasing the JuiceDrinks, Plaintiff was seeking beverages that were
7 beneficial to digestive and overall health when consumed, that is, whose regular consumption
8 would not harm her digestive health or increase her risk of disease.

9 111. The digestive health and overall wellness representations on the JuiceDrinks' 10 packaging, however, were misleading, and had the capacity, tendency, and likelihood to 11 confuse or confound Plaintiff and other consumers acting reasonably. This is because, as 12 described in detail herein, the Products actually harm digestive health and are likely to 13 increase the risk of digestive health issues and other chronic diseases when regularly 14 consumed.

112. Plaintiff is not a nutritionist, food expert, or food scientist, but rather a lay 15 consumer who did not have the specialized knowledge that NextFoods had regarding the 16 nutrients present in its JuiceDrinks. At the time of purchase, Plaintiff was unaware of the 17 extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, adversely 18 affects digestive health, blood glucose and cholesterol levels, and increases inflammation. 19 She was also unaware of what amount of free sugar might have such an effect. She also did 20 21 not know the extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, increases risk of chronic digestive diseases and increases risk of metabolic 22 disease, liver disease, heart disease, diabetes, and other morbidity. She also did not know 23 what amount of free sugar might have such an effect. 24

113. The average and reasonable consumer is unaware that or at least the extent to
which consuming high amounts of free sugar, like that in the JuiceDrinks, adversely affects
digestive health, blood glucose and cholesterol levels, and increases inflammation. The
reasonable consumer is also unaware what amount of free sugar might have such an effect.

1 The average and reasonable consumer is unaware that or at least the extent to which 2 consuming high amounts of free sugar, like that in the JuiceDrinks, increases risk of chronic 3 digestive diseases and increases risk of metabolic disease, liver disease, heart disease, 4 diabetes, and other morbidity. The average or reasonable consumer is also unaware of what 5 amount of free sugar might have such an effect.

6 114. Numerous studies demonstrate that the mandatory nutrition facts are not
7 sufficient to allow consumers to make accurate assessments of the healthfulness of foods and
8 beverages.

9 115. To start, "[m]any consumers have difficulty interpreting nutrition labels[.]" In
10 fact, the "mandated nutrition labels have been criticized for being too complex for many
11 consumers to understand and use."⁹³ "Understanding the NFP label requires health literacy,
12 that is, 'the capacity to obtain, process, and understand basic health information and services
13 needed to make appropriate health decisions.' However, a sizable proportion of the US
14 population is deficient in health literacy."⁹⁴

15 116. For example, "[t]he 2003 National Assessment of Adult Literacy found that
more than one-third of the US population had only basic or below-basic health literacy,
meaning they would have difficulty viewing the nutrition labels of 2 different potato chip
packages and determining the difference in the number of calories."⁹⁵ And other "studies
have found that even high school graduates and college students lack the basic health literacy
skills to effectively apply nutrition label information."⁹⁶

26 $||^{94}$ *Id.*

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27 $||^{95}$ Id.

28 $||^{96}$ Id.

Persoskie A, Hennessy E, Nelson WL, "US Consumers' Understanding of Nutrition Labels
 in 2013: The Importance of Health Literacy," 14 *Prev. Chronic Dis.* 170066 (2017).

1 117. While it may be unfortunate, the most consumers "ability to interpret nutrition
 2 label information [is] poor" and "[e]ven a college education did not ensure nutrition label
 3 understanding."⁹⁷

4 118. In short, "[a] substantial proportion of consumers in this country, including those
5 with a college education, have difficulty understanding NFP labels, which is likely a function
6 of limited health literacy."⁹⁸

119. Not only does the reasonable consumer have difficulty using the nutrition facts
panel deciding if a food or beverage is healthy or unhealthy is complex and the most
consumers have difficulty accurately assessing the healthfulness of such products.

10 120. This has been studied and found to be true in regard to sugar containing
11 beverages. Specifically, even though one may understand a drink is high in sugar and have
12 some notion that sugar can be harmful, many nevertheless still view such products as overall
13 being healthful when there is a health or nutritional claim made on a label.

14 121. In one study, for example, "[w]hile participants were aware that beverages can
15 contain high amounts of sugar, and that this can be harmful to health, many other factors
16 influence the perceptions of beverage healthfulness *and these can outweigh the perceived*17 *harms of consumption.*"⁹⁹

18 122. In fact, "research indicates that consumers hold erroneous views about the
19 healthfulness of certain sugar-containing beverages. For example, previous research has
20 indicated that beverages such as juice, flavoured waters, sports drinks (e.g. Gatorade) and
21 iced teas, are perceived to be healthy, or healthier, and as less likely to lead to disease

97 Id.

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 $\begin{array}{c|c} 25 \\ 26 \end{array} \Big|_{98} Id.$

⁹⁹ Aimee L. Brownbill et al., "What makes a beverage healthy? A qualitative study of young adults' conceptualisation of sugar-containing beverage healthfulness," 150 *Appetite* 104675 (2020).

development, compared to soda (or 'soft drink' e.g. Coca-Cola; Sprite) or energy drinks (e.g.
 Red Bull)."¹⁰⁰

123. In one study, "sugar content, nutritional value, naturalness and functionality
were important factors participants considered in their conceptualisation of beverage
healthfulness. Participants suggested that sugar content was a primary indicator of how
healthy a beverage was *but lacked knowledge about the amount of sugar in beverages, and how much should be considered harmful for health.*"¹⁰¹

8 124. Crucially, "[m]any participants perceived juice to be a healthier option. Juices 9 were viewed by some participants as equating to fruit consumption or as providing important 10 nutrients to the consumer. While it was common for participants to identify that juice 11 contained sugar, the perceived nutritional benefits appeared to offset concerns about sugar 12 content for some participants."¹⁰²

13 125. In addition, "[b]everages that were perceived as having added nutrients were
14 seen as healthier. Nutritional value appeared to be particularly relevant to participants'
15 ranking of the relative healthfulness of beverages."¹⁰³

16 126. Likewise, if a beverage purported to provide a functional benefit, "that
17 functionality of beverages may negate concern about sugar content."¹⁰⁴

18 127. Unfortunately, "research has similarly shown that consumers often focus more
19 on added nutrients than unhealthy ingredients and that added nutrients can be seen to
20 counteract the effect of unhealthy ingredients."¹⁰⁵

100 Id

¹⁰¹ *Id*.

 102 Id.

 103 Id.

 104 *Id*.

 105 Id.

128. In short, "health-related marketing . . . may mislead consumers to more positively assess the healthfulness of sugar-containing beverages."¹⁰⁶

129. That health positioning may mislead consumers is no secret to marketers as there
is a wealth of research showing that all sorts of health related representations may mislead
consumers to believe a product is healthier than it is—despite them being aware of the sugar
content.

7 130. For example, "[n]utrient content claims may lead consumers to mistakenly infer
8 that a product is healthful, regardless of its overall nutritional profile (i.e., the "health halo
9 effect") and can subsequently increase intentions to purchase the product (Roe et al., 1999;
10 Choi et al., 2013; Schuldt and Schwarz, 2010; Kaur et al., 2017; Talati et al., 2017)."¹⁰⁷

11 131. Likewise, "research that has found that health-related and nutrient content
12 claims make food and beverages seem healthier and more appealing (Roe et al., 1999; Choi
13 et al., 2013; Schuldt and Schwarz, 2010; Kaur et al., 2017; Talati et al., 2017; Fernan et al.,
14 2018)."¹⁰⁸

15 132. Health positioning claims also have the specific effect of "decreas[ing]
16 perceptions of the presence of certain less healthful nutrients."¹⁰⁹

17 133. And the presence of such claims make consumers "1) less likely to look for
18 nutrition information on the Nutrition Facts label, 2) more likely to select the product for
19 purchase, 3) more likely to perceive the product as healthier, and 4) less likely to correctly
20 choose the healthier product."¹¹⁰

22 106 Id.

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23 $\|_{107}$ Id.

108 Id.

Linda Verrill et al., "Vitamin-Fortified Snack Food May Lead Consumers to Make Poor Dietary Decisions, Journal of the Academy of Nutrition and Dietetics," 117:3, 376-385
(2017).

28 $\|^{110}$ Id.

134. One study meant to test consumers ability to determine which of six snack products were the healthiest, found that "[o]nly 9% of Americans could identify the healthiest 2 cereal bar," and "81% wrongly identified the healthiest choice."¹¹¹ 3

This data shows that identifying real, healthy products appears to be a serious difficulty 4 for American shoppers.¹¹² 5

135. Plaintiff acted reasonably in relying on the challenged labeling claims, which 6 NextFoods intentionally placed on the JuiceDrinks' labeling with the intent to induce average 7 consumers into purchasing the products. 8

136. Plaintiff would not have purchased the JuiceDrinks if she knew that the labeling 9 claims were false and misleading in that the products do not provide the claimed benefits and 10 actually harm digestive and overall health. 11

12 137. The JuiceDrinks cost more than similar products without misleading labeling, and would have cost less absent NextFoods' false and misleading statements and omissions. 13

138. Through the misleading labeling claims and omissions, NextFoods was able to 14 gain a greater share of the juice market than it would have otherwise and also increased the 15 size of the market. 16

139. Plaintiff paid more for the JuiceDrinks, and would only have been willing to pay 17 less, or unwilling to purchase the JuiceDrinks at all, absent the false and misleading labeling 18 complained of herein. 19

20 140. Plaintiff would not have purchased the JuiceDrinks if she had known that the Products were misbranded pursuant to California and FDA regulations or that the challenged 21 claims were false or misleading. 22

23 141. For these reasons, the JuiceDrinks were worth less than what Plaintiff and the Class paid for them. 24

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- ¹¹¹ *Id*. 27
- 28 112 Id.

142. Instead of receiving products that had actual healthful qualities, the JuiceDrinks
 Plaintiff and the Class received were of the type that harms digestive health and increases risk
 of chronic diseases.

4 143. Plaintiff and the Class lost money as a result of NextFoods' deceptive claims,
5 omissions, and practices in that they did not receive what they paid for when purchasing the
6 JuiceDrinks.

CLASS ACTION ALLEGATIONS

8 144. While reserving the right to redefine or amend the class definition prior to or as 9 part of a motion seeking class certification, pursuant to Federal Rule of Civil Procedure 23, 10 Plaintiff seeks to represent a class of all persons in California who, at any time from four 11 years preceding the date of the filing of this Complaint to the time a class is notified (the 12 "Class Period"), purchased, for personal or household use, and not for resale or distribution, 13 any of the JuiceDrinks (the "Class").

14 145. The members in the proposed Class are so numerous that individual joinder of
all members is impracticable, and the disposition of the claims of all Class Members in a
single action will provide substantial benefits to the parties and Court.

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146. Questions of law and fact common to Plaintiff and the Class include:

a. whether NextFoods communicated a message regarding digestive and overall healthfulness of the Products through its packaging and advertising;

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b. whether those messages were material, or likely to be material, to a reasonable consumer;

c. whether the challenged claims are false, misleading, or reasonably likely to deceive a reasonable consumer;

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d. whether NextFoods' conduct violates public policy;

e. whether NextFoods' conduct violates state or federal food statutes or
regulations;

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f. the proper amount of damages, including punitive damages;

g. the proper amount of restitution; and

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h. the proper amount of attorneys' fees.

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147. These common questions of law and fact predominate over questions that affect only individual Class Members.

148. Plaintiff's claims are typical of Class Members' claims because they are based
on the same underlying facts, events, and circumstances relating to NextFoods' conduct.
Specifically, all Class Members, including Plaintiff, were subjected to the same misleading
and deceptive conduct when they purchased the JuiceDrinks and suffered economic injury
because the products are misrepresented. Absent NextFoods' business practice of deceptively
and unlawfully labeling the JuiceDrinks, Plaintiff and Class Members would not have
purchased the products.

149. Plaintiff will fairly and adequately represent and protect the interests of the
Class, has no interests incompatible with the interests of the Class, and has retained counsel
competent and experienced in class action litigation, and specifically in litigation involving
the false and misleading advertising of foods.

15 150. Class treatment is superior to other options for resolution of the controversy
16 because the relief sought for each Class Member is small, such that, absent representative
17 litigation, it would be infeasible for Class Members to redress the wrongs done to them.

18 151. NextFoods has acted on grounds applicable to the Class, thereby making
19 appropriate declaratory relief concerning the Class as a whole.

20 152. As a result of the foregoing, class treatment is appropriate under Fed. R. Civ. P.
21 23(a), and 23(b)(3).

CAUSES OF ACTION

FIRST CAUSE OF ACTION

24 Violations of the Unfair Competition Law, Cal. Bus. & Prof. Code §§ 17200 *et seq.*

25 153. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint
26 as if set forth in full herein.

27 154. The UCL prohibits any "unlawful, unfair or fraudulent business act or practice."
28 Cal. Bus. & Prof. Code § 17200.

155. The acts, omissions, misrepresentations, practices, and non-disclosures of NextFoods as alleged herein constitute business acts and practices.

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Fraudulent

156. A statement or practice is fraudulent under the UCL if it is likely to deceive a significant portion of the public, applying an objective reasonable consumer test.

6 157. As set forth herein, NextFoods' claims relating to the JuiceDrinks are likely to
7 deceive reasonable consumers and the public.

<u>Unlawful</u>

9 158. The acts alleged herein are "unlawful" under the UCL in that they violate at least
10 the following laws:

• The False Advertising Law, Cal. Bus. & Prof. Code §§ 17500 et seq.;

- The Consumers Legal Remedies Act, Cal. Civ. Code §§ 1750 et seq.;
 - The Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301 *et seq.*; and
- The California Sherman Food, Drug, and Cosmetic Law, Cal. Health & Safety Code §§ 110100 *et seq*.

<u>Unfair</u>

17 159. NextFoods' conduct with respect to the labeling, advertising, and sale of the
18 JuiceDrinks was unfair because NextFoods' conduct was immoral, unethical, unscrupulous,
19 or substantially injurious to consumers, and the utility of its conduct, if any, does not outweigh
20 the gravity of the harm to its victims.

160. NextFoods' conduct with respect to the labeling, advertising, and sale of the
JuiceDrinks was and is also unfair because it violates public policy as declared by specific
constitutional, statutory or regulatory provisions, including but not necessarily limited to the
False Advertising Law, portions of the Federal Food, Drug, and Cosmetic Act, and portions
of the California Sherman Food, Drug, and Cosmetic Law.

161. NextFoods' conduct with respect to the labeling, advertising, and sale of the
JuiceDrinks was and is also unfair because the consumer injury was substantial, not
outweighed by benefits to consumers or competition, and not one consumers themselves

could reasonably have avoided. Specifically, the increase in profits obtained by NextFoods 1 through the misleading labeling does not outweigh the harm to Class Members who were 2 3 deceived into purchasing the JuiceDrinks believing they were beneficial to gut health and overall health when in fact they are of the type that is likely to detriment gut health and overall 4 health. 5

162. NextFoods profited from the sale of the falsely, deceptively, and unlawfully 6 7 advertised JuiceDrinks to unwary consumers.

8 163. Plaintiff has suffered injury in fact as a result of NextFoods' unlawful conduct. 9 164. Plaintiff and the Class also seek an order for the restitution of all monies from the sale of the JuiceDrinks, which were unjustly acquired through acts of unlawful 10 competition. 11

12 165. Because Plaintiff's claims under the "unfair" prong of the UCL sweep more broadly than their claims under the FAL, CLRA, or UCL's "fraudulent" prong, Plaintiff's 13 14 legal remedies are inadequate to fully compensate Plaintiff for all of NextFoods' challenged 15 behavior.

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SECOND CAUSE OF ACTION

Violations of the False Advertising Law, Cal. Bus. & Prof. Code §§ 17500 et seq.

166. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint 18 as if set forth in full herein. 19

20 167. The FAL provides that "[i]t is unlawful for any person, firm, corporation or association, or any employee thereof with intent directly or indirectly to dispose of real or 21 personal property or to perform services" to disseminate any statement "which is untrue or 22 misleading, and which is known, or which by the exercise of reasonable care should be 23 known, to be untrue or misleading." Cal. Bus. & Prof. Code § 17500. 24

25 168. It is also unlawful under the FAL to disseminate statements concerning property or services that are "untrue or misleading, and which is known, or which by the exercise of 26 reasonable care should be known, to be untrue or misleading." Id. 27

169. As alleged herein, the advertisements, labeling, policies, acts, and practices of NextFoods relating to the JuiceDrinks misled consumers acting reasonably as to the digestive 2 3 health impact and overall health impact of the products.

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170. Plaintiff suffered injury in fact as a result of NextFoods' actions as set forth herein because Plaintiff purchased the JuiceDrinks in reliance on NextFoods' false and 5 misleading marketing claims stating or suggesting that the products, among other things, are 6 beneficial to digestive health and overall health. 7

8 171. NextFoods' business practices as alleged herein constitute unfair, deceptive, untrue, and misleading advertising pursuant to the FAL because NextFoods has advertised 9 10 the JuiceDrinks in a manner that is untrue and misleading, which NextFoods knew or reasonably should have known, and omitted material information from the JuiceDrinks' 11 labeling. 12

172. NextFoods profited from the sale of the falsely and deceptively advertised 13 14 JuiceDrinks to unwary consumers.

15 173. As a result, Plaintiff, the Class, and the general public are entitled to restitution, 16 and an order for the disgorgement of the funds by which NextFoods was unjustly enriched.

17 174. Because the Court has broad discretion to award restitution under the FAL and could, when assessing restitution under the FAL, apply a standard different than that applied 18 to assessing damages under the CLRA or commercial code (for Plaintiff's breach of warranty 19 20 claims), and restitution is not limited to returning to Plaintiff and class members monies in which they have an interest, but more broadly serves to deter the offender and others from 21 future violations, the legal remedies available under the CLRA and commercial code are more 22 limited than the equitable remedies available under the FAL, and are therefore inadequate. 23

THIRD CAUSE OF ACTION

Violations of the Consumers Legal Remedies Act, Cal. Civ. Code §§ 1750 et seq.

175. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if set forth in full herein.

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1 176. The CLRA prohibits deceptive practices in connection with the conduct of a
 2 business that provides goods, property, or services primarily for personal, family, or
 3 household purposes.

- 177. NextFoods' false and misleading labeling and other policies, acts, and practices
 were designed to, and did, induce the purchase and use of the JuiceDrinks for personal,
 family, or household purposes by Plaintiff and Class Members, and violated and continue to
 violate the following sections of the CLRA:
- 8 a. § 1770(a)(5): representing that goods have characteristics, uses, or
 9 benefits which they do not have;
- b. § 1770(a)(7): representing that goods are of a particular standard, quality,
 or grade if they are of another;
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c. § 1770(a)(9): advertising goods with intent not to sell them as advertised; and

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d. § 1770(a)(16): representing the subject of a transaction has been supplied in accordance with a previous representation when it has not.

16 178. NextFoods profited from the sale of the falsely, deceptively, and unlawfully
17 advertised JuiceDrinks to unwary consumers.

18 179. NextFoods' wrongful business practices constituted, and constitute, a continuing
19 course of conduct in violation of the CLRA.

180. Pursuant to California Civil Code § 1782, more than 30 days before filing this
lawsuit, Plaintiff sent written notice of her claims and NextFoods' particular violations of the
Act to NextFoods by certified mail, return receipt requested, but NextFoods has failed to
implement remedial measures.

181. As a result, Plaintiff and the Class have suffered harm, and therefore seek (a)
actual damages resulting from purchases of the JuiceDrinks sold throughout the Class Period
to all Class Members, (b) punitive damages, (c) restitution, and (d) attorneys' fees and costs. *See* Cal. Civ. Code § 1782(d).

182. In compliance with Cal. Civ. Code § 1780(d), Plaintiff filed an affidavit of venue with the original complaint. *See* Dkt. No. 1-2.

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FOURTH CAUSE OF ACTION

Breaches of Express Warranties, Cal. Com. Code § 2313(1)

5 183. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint
6 as if set forth in full herein.

7 184. Through the JuiceDrinks' labeling, NextFoods made affirmations of fact or
8 promises, or description of goods as enumerated in paragraph 15, that, *inter alia*, the
9 JuiceDrinks are beneficial to digestive and overall health.

10 185. These representations were "part of the basis of the bargain," in that Plaintiff
11 and the Class purchased the JuiceDrinks in reasonable reliance on those statements. Cal. Com.
12 Code § 2313(1).

186. NextFoods breached its express warranties by selling JuiceDrinks that are not
beneficial to digestive or overall health, but rather contain high levels of free sugar that are
likely to increase the risk of chronic digestive diseases and other chronic diseases.

16 187. That breach actually and proximately caused injury in the form of the lost17 purchase price that Plaintiff and Class Members paid for the JuiceDrinks.

18 188. As a result, Plaintiff seeks, on behalf of herself and other Class Members, their
actual damages arising as a result of NextFoods' breaches of express warranty, including,
without limitation, expectation damages.

PRAYER FOR RELIEF

189. Wherefore, Plaintiff, on behalf of herself, all others similarly situated, and the
general public, prays for judgment against NextFoods as to each and every cause of action,
and the following remedies:

a. An Order declaring this action to be a proper class action, appointing Plaintiff as Class Representative, and appointing Plaintiff's undersigned counsel as Class Counsel;

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b. An Order requiring NextFoods to bear the cost of Class Notice;

1	c. An Order requiring NextFoods to disgorge all monies, revenues, and	
2	profits obtained by means of any wrongful act or practice;	
3	d. An Order requiring NextFoods to pay restitution to restore all funds	
4	acquired by means of any act or practice declared by this Court to be an unlawful,	
5	unfair, or fraudulent business act or practice, or untrue or misleading advertising, plus	
6	pre-and post-judgment interest thereon;	
7	e. An Order requiring NextFoods to pay compensatory damages and	
8	punitive damages as permitted by law;	
9	f. An award of attorneys' fees and costs; and	
10	g. Any other and further relief that Court deems necessary, just, or proper.	
11	JURY DEMAND	
12	190. Plaintiff hereby demands a trial by jury on all issues so triable.	
13		
14	Dated: May 27, 2022 /s/ Paul K. Joseph	
15	FITZGERALD JOSEPH LLP JACK FITZGERALD	
16	jack@fitzgeraldjoseph.com	
17	PAUL K. JOSEPH paul@fitzgeraldjoseph.com	
18	MELANIE PERSINGER	
19	melanie@fitzgeraldjoseph.com TREVOR M. FLYNN	
20	trevor@fitzgeraldjoseph.com	
21	Caroline Emhardt caroline@fitzgeraldjoseph.com	
22	2341 Jefferson Street, Suite 200	
23	San Diego, California 92110 Phone: (619) 215-1741	
24	Counsel for Plaintiff	
25		
26		
27		
28		

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Appendix 1

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Tropical Green







GoodBe Reboot STAAT YOUR GOODHEALTH GAME PLAN (1) Sign up at 12Day.GoodBelly.com. Check your email for coupons and print 'em out. Drink one 8 oz. glass of (3) delicious GoodBelly a day for 12 days. (That's just 3 cartons worth.) Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles, the rest of you does too.

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Blueberry Acai



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Pomegranate Blackberry







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Cranberry Watermelon





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Raspberry Blackberry



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Raspberry Blackberry



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GoodBelly STIRI TODA COODREALTA GAN (1) Sign up at: goodbelly.com/12-day reboot Check your email for coupons @ (1) Drink one 8 oz. glass of delicious GoodBelly a day for 12 days. (That's just 3 cartons worth) We guarantee you'll love it - 0 or your money back.¹ Reboot your belly, then make Goodlielly your daily drink to knep your GoodHealth going Because when your belly smiles, the rest of you does too. I Some restrictions apply

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Peach Mango Orange



Nutrition Facts Serving Size 8 oz. (240 mL) Servings Per Package about 4			
mount Per Serving			
Calories 90			
Calories from Fat	0		
% Daily Va	lue**		
fotal Fat Og	0%		
Saturated Fat Og	0%		
Trans Fat Og			
Cholesterol Omg	0%		
Sodium 20mg	1%		
otassium 140mg	4%		
fotal Carb. 21g	7%		
Dietary Fiber Og	0%		
Sugars 19g			
Protein Og			
/itamin A 0% , Vitamin (C 0%		
alcium 0% 🔹 Iro	n 0%		
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower Jepending on your calorie needs.			
NGREDIENTS: FILTERED WATER, O EAR JUICE FROM CONCENTRATE, Rganic Peach Juice From Oncentrate, organic Mango	RGANIC		

CONCENTRATE, ORGANIC MANGO PUREE, ORGANIC ORANGE JUICE FROM CONCENTRATE, ORGANIC EVAPORATED CANE SUGAR, CONTAINS 2% OR LESS OF NATURAL FLAVORS, CALCIUM CITRATE, CITRIC ACID, ORGANIC GUAR GUM, LACTOBACILLUS PLANTARUM 299V.