

No. 13-55943

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

ARLEEN CABRAL, individually and on behalf of those similarly  
situated

*Plaintiff-Appellee,*

v.

SUPPLE, LLC,

*Defendant-Appellant.*

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On Appeal by Permission from an Order Granting Class Certification  
of the United States District Court  
Central District of California, No. 5:12-cv-00085 MWF (OPx)  
The Honorable Michael W. Fitzgerald

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**BRIEF OF *AMICUS CURIAE* CENTER FOR SCIENCE IN THE  
PUBLIC INTEREST IN SUPPORT OF APPELLEE ARLEEN  
CABRAL AND AFFIRMANCE OF THE JUDGMENT OF THE  
DISTRICT COURT**

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## DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1, and Ninth Circuit Rule 29(c)(1), amicus curiae Center for Science in the Public interest states that it is a non-profit corporation with no parents, subsidiaries, or stockholders.

Dated: January 22, 2014                      Center for Science in the Public Interest

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*Amicus curiae* Center for Science in the Public Interest submits this brief in support of Plaintiff-Appellee Arleen Cabral with the consent of Appellant-Defendant Supple, LLC. No person other than the *amicus curiae* Center for Science in the Public Interest authored the brief in whole or in part or contributed money to fund the preparation of this brief.

### **INTEREST OF AMICUS CURIAE**

Amicus curiae Center for Science in the Public Interest (CSPI) is a non-profit organization with longstanding interests in the issues presented by this case. Since 1971, CSPI has been a strong advocate for nutrition and health, food safety, and sound science. CSPI has long sought to educate the public, advocate government policies that are consistent with scientific evidence on health and environmental issues, and counter industry's powerful influence on public opinion and public policies. Over the years, CSPI has grown along with its reputation as an influential and independent science-based organization. The United States Food and Drug Administration (FDA) has given CSPI the Commissioner's Special Citation, the highest award given to outside organizations or individuals.

CSPI has been monitoring deceptive marketing and labeling claims for decades, including those made by the multi-billion dollar supplement industry. Although many people don't need supplements at all, and there is evidence that at times supplements cause more harm than good, there is evidence suggesting that glucosamine sulfate/chondroitin sulfate supplements may be effective for treating osteoarthritis and its symptoms. However, supplements are "credence goods," meaning that consumers are not able to judge a supplement's effects even after they use it, and are unlikely to understand the studies and substantiation for companies' claims.

CSPI believes that the nature of the product at issue here, paired with supplements' placebo effect, exacerbates consumer confusion and necessitates ensuring industry accountability for false or misleading advertising.

## INTRODUCTION AND SUMMARY OF ARGUMENT

Plaintiff-Appellee Arleen Cabral suffers from arthritis in her knee. When arthritis affects the knee, it is more apt to cause pain and stiffness, as well as functional limitation.<sup>1</sup> Ms. Cabral purchased Defendant-Appellant's (the "Company" or "Supple LLC") product, Supple, based on the Company's representations that it was "clinically proven"<sup>2</sup> to treat joint pain caused by arthritis. Although Ms. Cabral used the product as directed, she experienced none of the Company's promised benefits—likely because Supple contains glucosamine *hydrochloride*—an ineffective form of glucosamine—rather than glucosamine *sulfate*.

The district court correctly rejected the Company's criticisms of existing, well-established scientific consensus on glucosamine hydrochloride, as well as the Company's claims that consumers' repeat-purchasing behavior proved that consumers could not have been deceived by the Company's representations. Instead, the district court certified a class of consumers who purchased Supple for

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<sup>1</sup> R.C. Lawrence et al., *Estimate of the Prevalence of Arthritis and Selected Musculoskeletal Disorders in the United States*, 41 *ARTHRITIS & RHEUMATOLOGY* 778 (May 1998).

<sup>2</sup> See e.g., Wade Decl. Ex. 14, 22 (Doc. 36).

personal use.<sup>3</sup> The district court correctly found that Ms. Cabral's motion met the requirements of Rule 23. In its order on class certification, the district court accurately reminded Supple LLC that class certification is proper here because the "truth or falsity of Supple's advertising will be determined on the basis of common proof—*i.e.*, scientific evidence that the Beverage is 'clinically proven effective' (or not)—rather than on the question whether repeat customers were satisfied[.]"<sup>4</sup>

But, in its opening brief, the Company again chooses to contest the scientific evidence relating to glucosamine hydrochloride, and again proffers purchasing data that demonstrate only that customers continued to be deceived by Supple after their initial purchase.<sup>5</sup> Scientific consensus on glucosamine hydrochloride confirms that it is not effective at treating osteoarthritis and its symptoms. Moreover, the nature of the product is such that consumers are unable to determine whether claims about it are truthful. The Court should reject the Company's improper demands for individualized proof of

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<sup>3</sup> See Order Granting Class Certification (Doc. 103) at 2, 13.

<sup>4</sup> Order Granting Class Certification (Doc. 103) at 7.

<sup>5</sup> See Supple LLC's Opening Brief (Opening Brief) (Dkt. 11-1) at 21-28.

each class member's deception<sup>6</sup> as well as its ineffectual attacks on sound science.

## ARGUMENT

### I. Glucosamine Hydrochloride is Ineffective for Treating Osteoarthritis and its Symptoms

Although a plaintiff need not prove her case on a motion for class certification, Ms. Cabral's case rests on sound science, and presents a common question for the entire class: whether the Company misrepresented the benefits of Supple. Because Supple's advertising makes a core set of common claims about the product's

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<sup>6</sup> One of the Company's main arguments—that the existence of repeat purchasers somehow demonstrates that customers were not misled—is either a factual issue, or is a circuitous method of attacking standing. Either way, the Company's argument is unavailing. Supple LLC cannot demand that Ms. Cabral submit “evidence that any class member . . . was dissatisfied.” Opening Brief (Dkt. 11-1) at 24. It should go without saying that factual proof of consumer perception is a merits issue inappropriate at class certification. *See* Order Granting Class Certification (Doc. 103) at 4; *see also* *Ries v. Arizona Beverages USA LLC*, 287 F.R.D. 523, 536 (N.D. Cal. 2012):

The focus of the UCL and FAL is on *the actions of the defendants, not on the subjective state of mind of the class members*. All of the proposed class members would have purchased the product bearing the alleged misrepresentations. Such a showing of concrete injury under the UCL and FAL is sufficient to establish Article III standing. Thus, although we follow the decisions holding that *plaintiffs need not introduce evidence to establish the Article III standing of absent class members at this time, any inquiry into whether the unnamed class members satisfy Article III standing depends upon an objective test, not a fact-intensive inquiry as Defendants contend*.

(emphasis added) (internal citations omitted).

efficacy—and because those claims are manifestly false—the district court was correct to certify the class.

Glucosamine sulfate supplements have been used in treating osteoarthritis for many years, often in combination with chondroitin sulfate.<sup>7</sup> Although numerous studies support the efficacy of glucosamine supplements in treating osteoarthritis, these studies are based on the use of glucosamine *sulfate*,<sup>8</sup> not glucosamine *hydrochloride*—the ingredient contained in Supple. Although glucosamine is the active ingredient in these osteoarthritis supplements, it needs to be stabilized as a salt. The stabilizing salt, paired with the active ingredient, results in either glucosamine hydrochloride or glucosamine sulfate. Unfortunately for consumers

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<sup>7</sup> Glucosamine sulfate/Chondroitin sulfate supplements are not used to treat rheumatoid arthritis, fibromyalgia, and other forms of arthritis.

<sup>8</sup> See e.g., Gabriel Herrero-Beaumont et al., *Glucosamine Sulfate in the Treatment of Knee Osteoarthritis Symptoms: A Randomized, Double-Blind, Placebo-Controlled Study Using Acetaminophen as a Side Comparator*, 56 ARTHRITIS & RHEUMATISM 555 (Feb. 2007); Wolfgang Noack et al., *Glucosamine Sulfate in Osteoarthritis of the Knee*, 2 OSTEOARTHRITIS & CARTILAGE 51 (Mar. 1994); H. Mueller-FasBender et al., *Glucosamine Sulfate Compared to Ibuprofen in Osteoarthritis of the Knee*, 2 OSTEOARTHRITIS & CARTILAGE 61 (Mar. 1994); J.Y. Reginster et al., *Long-term Effects of Glucosamine Sulphate on Osteoarthritis Progression: A Randomised, Placebo-Controlled Clinical Trial*, 357 LANCET 251 (2001); K. Pavelka et al., *Glucosamine Sulfate Use and Delay of Progression of Knee Osteoarthritis: A 3-year, Randomized, Placebo-Controlled, Double-Blind Study*, ARCHIVES OF INTERNAL MED. 2113 (Oct. 2002).

of Supple, the scientific consensus on glucosamine hydrochloride is that it is simply “not effective.”<sup>9</sup>

Throughout its opening brief, Supple LLC misstates the status of research relating to glucosamine supplements—arguing that there is ample room for reliable scientific minds to disagree regarding the clinical evidence for the efficacy of glucosamine hydrochloride.<sup>10</sup> This could not be further from the truth. (Even Supple LLC could only find studies involving glucosamine *sulfate* to support its claim that Supple was “clinically proven effective in treating joint pain.”) While there are numerous published, well-respected, and often human *in vivo*<sup>11</sup> studies, demonstrating that glucosamine sulfate is effective at treating osteoarthritis,<sup>12</sup> the same cannot be said for glucosamine

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<sup>9</sup> Steven C. Vlad et al., *Glucosamine for Pain in Osteoarthritis: Why Do Trial Results Differ?*, 56 ARTHRITIS & RHEUMATISM 2267 (July 2007).

<sup>10</sup> See Opening Brief (Dkt. 11-1) at 30, n.8.

<sup>11</sup> *In vivo* studies involve the use of a whole, living organism, whereas *in vitro* studies use components of an organism that have been isolated from their biological surroundings.

<sup>12</sup> See Yves Henrotin et al., *Is There Any Scientific Evidence for the Use of Glucosamine in the Management of Human Osteoarthritis?*, 14 ARTHRITIS RESEARCH & THERAPY 201 (2012) (“Most of the available data on the pharmacokinetics of glucosamine have been obtained with glucosamine sulfate; few studies have been published on the pharmacokinetics of glucosamine hydrochloride in human subjects.”). See also Timothy E. McAlindon et al., *Glucosamine and Chondroitin for Treatment of Osteoarthritis: A Systematic Quality Assessment and Meta-analysis*, 283 JAMA 1469 (Mar. 2000) (A meta-analysis of double-blind, randomized, placebo-controlled

hydrochloride. Instead, the only available and reliable data indicate that glucosamine hydrochloride is no more effective than a placebo.<sup>13</sup>

In its brief, the Company relies on the fact that regulatory agencies throughout Europe have approved of glucosamine as a treatment for osteoarthritis.<sup>14</sup> But it ignores the salient fact that such agencies have approved only glucosamine *sulfate*, not glucosamine hydrochloride.<sup>15</sup> Thus, while the Osteoarthritis Research Society International and the European League Against Rheumatism have recommended the use of glucosamine *sulfate* for the management of hip and knee osteoarthritis, they have not done so for glucosamine hydrochloride.<sup>16</sup> Indeed, “[n]one of the current guidelines have

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trials of four or more weeks’ duration uncovered only one study of glucosamine hydrochloride to meet that criteria, and concluded that glucosamine hydrochloride is not effective).

<sup>13</sup> See e.g., Daniel O. Clegg et al., *Glucosamine, Chondroitin Sulfate, and the Two in Combination for Painful Knee Osteoarthritis*, 354 NEW ENG. J. MED. 795 (Feb. 2006).

<sup>14</sup> See J.Y. Reginster et al., *Long-Term Effects of Glucosamine Sulfate on Osteoarthritis Progression: A Randomised, Placebo-Controlled Clinical Trial*, 357 LANCET 251 (2001); Yves Henrotin et al., *Is There Any Scientific Evidence for the Use of Glucosamine in the Management of Human Osteoarthritis?*, 14 ARTHRITIS RESEARCH & THERAPY 201 (2012).

<sup>15</sup> The Company manipulates facts presented to the Court when asserting that “a trial of this case would be . . . asking the jury to . . . second-guess the international regulatory experts that have granted G/C drug status in regulatory countries.” Opening Brief (Dkt. 11-1) at 30, n.8.

<sup>16</sup> Yves Henrotin et al., *Is There Any Scientific Evidence for the Use of Glucosamine in the Management of Human Osteoarthritis?*, 14 ARTHRITIS RESEARCH & THERAPY 201

recommended the use of glucosamine hydrochloride, only glucosamine sulfate.”<sup>17</sup>

In fact, respected regulatory agencies across the world that have examined glucosamine hydrochloride as a treatment for osteoarthritis have agreed that:

The clinical claim that glucosamine hydrochloride is no worse than celecoxib<sup>18</sup> in terms of effectiveness and toxicity was not considered by the PBAC [Pharmaceutical Benefits Advisory Committee] to be supported by the evidence presented. The PBAC considered that the claim for non-inferiority between glucosamine hydrochloride and celecoxib was poorly supported by the key trials.<sup>19</sup>

Apart from its mischaracterization of the regulatory agencies’ positions, the Company omits from its brief the fact that it is well-

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(2012); Karel Pavelka et al., *Glucosamine Sulfate Use and Delay of Progression of Knee Osteoarthritis: A 3-Year, Randomized, Placebo-Controlled, Double-Blind Study*, 162 ARCHIVES OF INTERNAL MED. 2113 (Oct. 2002) (“glucosamine sulfate, that is, the original glucosamine sulfate described in most of the literature and available as a prescription drug for osteoarthritis in several European and other countries . . .”) (internal citations omitted).

<sup>17</sup> Yves Henrotin et al., *Is There Any Scientific Evidence for the Use of Glucosamine in the Management of Human Osteoarthritis?*, 14 ARTHRITIS RESEARCH & THERAPY 201 (2012).

<sup>18</sup> Celecoxib is a prescription nonsteroidal anti-inflammatory drug used to relieve pain, tenderness, swelling, and stiffness caused by osteoarthritis, rheumatoid arthritis, and ankylosing spondylitis (arthritis that mainly affects the spine).

<sup>19</sup> Public Summary Document, Glucosamine Hydrochloride July 2006 Pharmaceutical Benefits Advisory Committee of Australia (PBAC) Meeting (rejecting submission seeking a restricted benefit Pharmaceutical Benefits Scheme (PBS) listing for the symptomatic treatment of osteoarthritis).

established in the scientific community that glucosamine hydrochloride is ineffective in treating osteoarthritis. Meta-analyses of randomized, double-blind, placebo-controlled trials of glucosamine have repeatedly confirmed that no studies meeting these criteria demonstrate glucosamine hydrochloride to be anything other than “not effective.”<sup>20</sup> And doctors agree that patients should be advised to take glucosamine sulfate rather than glucosamine hydrochloride,<sup>21</sup> attesting that:

The finding that glucosamine hydrochloride was not more efficacious than placebo is not surprising. Several systematic reviews and meta-analyses have examined the efficacy of glucosamine in the treatment of osteoarthritis of the knee. . . differences between the groups [glucosamine hydrochloride and placebo] in the WOMAC<sup>22</sup> scores did not reach significance.<sup>23</sup>

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<sup>20</sup> Steven C. Vlad et al., *Glucosamine for Pain in Osteoarthritis: Why do Trial Results Differ?*, 56 *ARTHRITIS & RHEUMATISM* 2267 (July 2007); Timothy E. McAlindon et al., *Glucosamine and Chondroitin for Treatment of Osteoarthritis: A Systematic Quality Assessment and Meta-analysis*, 283 *JAMA* 1469 (Mar. 2000).

<sup>21</sup> Marc C. Hochberg, *Nutritional Supplements for Knee Osteoarthritis—Still No Resolution*, 354 *N. ENG. J. MED.* 858 (Feb. 2006); Jaya K. Rao, *Complementary and Alternative Medicine for Arthritis*, 68 *NORTH CAROLINA MED. J.* 453 (Nov./Dec. 2007).

<sup>22</sup> Western Ontario and McMaster Universities Arthritis Index (WOMAC), used to assess the pain, disability, and joint stiffness of knee and hip osteoarthritis sufferers.

<sup>23</sup> Marc C. Hochberg, *Nutritional Supplements for Knee Osteoarthritis—Still No Resolution*, 354 *N. ENG. J. MED.* 858 (Feb. 2006) (citing T.E. Towheed et al., *Glucosamine Therapy for Treating Osteoarthritis*, 2 *COCHRANE DATABASE SYST. REV.* CD002946 (2005). See also Yves Henrotin et al., *Is There Any Scientific Evidence for*

In short, experts agree that consumers seeking to use glucosamine for their osteoarthritis symptoms should take glucosamine sulfate rather than glucosamine hydrochloride.<sup>24</sup>

Given that government agencies as well as scientific meta-analyses of glucosamine trials<sup>25</sup> have, in no uncertain terms, concluded that “[g]lucosamine hydrochloride is not effective” and that it “lacks efficacy for pain in OA,”<sup>26</sup> it is dishonest for Supple LLC to claim that glucosamine hydrochloride provides any joint benefit at all to consumers. In so many words, the universal consensus of studies on glucosamine hydrochloride is that it is ineffective at treating osteoarthritis.<sup>27</sup>

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*the Use of Glucosamine in the Management of Human Osteoarthritis?*, 14 ARTHRITIS RESEARCH & THERAPY 201 (2012) (“**At this time, glucosamine hydrochloride cannot be recommended based on the available clinical data.**”) (emphasis added).

<sup>24</sup> E.g., Jaya K. Rao, *Complementary and Alternative Medicine for Arthritis*, 68 NORTH CAROLINA MED. J. 453 (Nov./Dec. 2007).

<sup>25</sup> Examining reports of randomized, double-blind, placebo-controlled trials of glucosamine for pain from osteoarthritis of the knee or hip.

<sup>26</sup> Osteoarthritis (OA). Steven C. Vlad et al., *Glucosamine for Pain in Osteoarthritis*, 56 ARTHRITIS & RHEUMATISM 2267 (July 2007) (“Trials using glucosamine hydrochloride had a very small summary effect size that was statistically indistinguishable from the null. . . . Therefore, we conclude that **glucosamine hydrochloride has no effect on pain and that future studies of this preparation are unlikely to yield useful results.**”) (emphasis added).

<sup>27</sup> *In vivo* human studies of glucosamine hydrochloride reveal that this type of glucosamine—the type contained in Supple—alone, or in combination with

The only studies done supporting the use of glucosamine hydrochloride in treating osteoarthritis are *in vitro* or published by non-peer-reviewed journals, and funded by industry. For example, the single study cited by Defendant's expert to substantiate his claim that "there is no reason to believe that glucosamine hydrochloride is different from glucosamine sulfate,"<sup>28</sup> was not placebo-controlled and lasted only four weeks—much too short a time to adequately test these substances.<sup>29</sup> And almost everyone in the study reported improvement in their symptoms (91% of those taking glucosamine hydrochloride, 90% of those taking glucosamine sulfate), which

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chondroitin sulfate, "did not reduce pain effectively in the overall group of patients with osteoarthritis of the knee." See e.g., Daniel O. Clegg et al., *Glucosamine, Chondroitin Sulfate, and the Two in Combination for Painful Knee Osteoarthritis*, 354 NEW ENG. J. MED. 795 (Feb. 2006) (a 24 week comparison of glucosamine hydrochloride 1500 mg, chondroitin sulfate 1200 mg, glucosamine hydrochloride and chondroitin combination (1500 mg and 1200mg respectively), celecoxib 200 mg, or placebo on participants with knee pain from osteoarthritis); Joseph B. Houpt et al., *Effect of Glucosamine Hydrochloride in the Treatment of Pain of Osteoarthritis of the Knee*, 26 J. RHEUMATOLOGY 2423 (Nov. 1999) (finding that **glucosamine hydrochloride performed no better than placebo at reducing pain after eight weeks of treatment**) (emphasis added); R. Christensen et al., *Superiority Trials in Osteoarthritis Using Glucosamine Hydrochloride as Comparator*, 1 OA ARTHRITIS 1 (Feb. 2001) ("**This paper clearly illustrates the ineffectiveness of GH [glucosamine hydrochloride] in the treatment of OA [osteoarthritis]**") (emphasis added).

<sup>28</sup> Rebuttal Expert Report of Jose Verges (Doc. 92) at 22.

<sup>29</sup> See Qiu G.X. et al., *A Multi-Central, Randomized, Controlled Clinical Trial of Glucosamine Hydrochloride/Sulfate in the Treatment of Knee Osteoarthritis*, 85 ZHONGHUA YI XUE ZA ZHI 3067-70 (2005).

strongly suggests that this degree of symptom relief in such a short period of time was due more to a placebo effect than anything else. On the other hand, the studies finding glucosamine hydrochloride *ineffective* are numerous, double-blind, placebo-controlled, *in vivo* studies.

Too often, companies intentionally mislead consumers, then hide behind a shield of a disclaimer or technicality. However, any reasonable consumer is likely to interpret claims from an “arthritis survivor” that “[o]ur glucosamine is clinically proven to rebuild damage[d] cartilage cells”; and “completely relieve[s] the symptoms of arthritis”<sup>30</sup> to mean that the product is a fast and effective treatment for arthritis.

This Court has confirmed that consumers should not be expected to look beyond prominent misleading representations for fine print disclosures or disclaimers.<sup>31</sup>

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<sup>30</sup> Order Granting Class Certification (Doc. 103) at 7.

<sup>31</sup> See *Williams v. Gerber*, 552 F.3d 934, 939 (9th Cir. 2008). Many cases follow the *Williams* court’s decision to deny manufacturers immunity by fine-print “corrections.” See, e.g., *Lam v. Gen. Mills, Inc.*, 859 F. Supp. 2d 1097, 1105 (N.D. Cal. 2012) (“Likewise, here, the Fruit Snacks’ ingredients list cannot be used to correct the message that reasonable consumers may take from the rest of the packaging: that the Fruit Snacks are made with a particular type and quantity of fruit.”); *Yumul v. Smart Balance, Inc.*, 733 F. Supp. 2d 1117, 1128 (C.D. Cal. 2010)

The Company cannot hide behind a disclaimer saying that “This product is not intended to diagnose, treat, cure or prevent any disease.”<sup>32</sup> It is well-established that disclaimers “have little impact on the consumers’ mental states relating to secondary meaning, confusion, purchase preference or the perception of quality.”<sup>33</sup>

This is because consumers “avoid having their cognitive systems ‘overloaded’ by processing too much information,” and even though “a person reads a message [it] does not necessarily mean that he reads the entire message.”<sup>34</sup> The Company included their disclaimer on a product promising seven day relief from arthritis. Supple LLC relied on the fact that disclaimers are not effective at curing deception or eliminating the potential for confusion,<sup>35</sup> and thus capitalized on consumers’ pre-conceived notions about the benefits and efficacy of glucosamine/chondroitin supplements.

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(“where product packaging contains an affirmative misrepresentation, the manufacturer cannot rely on the small-print . . . label to contradict and cure that misrepresentation”); *Wilson v. Frito-Lay N. Am., Inc.*, 12-1586 SC, 2013 WL 1320468 (N.D. Cal. Apr. 1, 2013).

<sup>32</sup> Opening Brief (Dkt. 11-1) at 15.

<sup>33</sup> Jacob Jacoby, *Why Disclaimers Fail*, 84 TRADEMARK REP. 224 (Mar.-Apr. 1994).

<sup>34</sup> Jacob Jacoby, *Why Disclaimers Fail*, 84 TRADEMARK REP. 224, 226 (Mar.-Apr. 1994).

<sup>35</sup> See Jacob Jacoby, *Why Disclaimers Fail*, 84 TRADEMARK REP. 224 (Mar.-Apr. 1994).

## **II. The Company's Repeat-Purchasing Theory is Fundamentally Flawed Because it is Inapplicable to Credence Goods and Ignores the Placebo Effect**

Beyond mischaracterizing the supporting science for glucosamine/chondroitin supplements, Supple LLC also bases a large portion of its appeal on the contention that the existence of repeat-purchasers of Supple amounts to “unrebutted evidence of satisfied customers.”<sup>36</sup> Not only does the Company fail to cite any support<sup>37</sup> for this fabricated contention that consumers cannot *continue* to be misled after purchasing a product once, it also fails to address the fact that the very nature of the product at issue here is ideally suited to continued consumer deception, even after purchase.

### **The Company's Repeat-Purchasing Theory Is Inapplicable to Credence Goods**

Supple, like other supplements and medications, is what economists call a “credence good.”<sup>38</sup> A credence good is a good whose qualities consumers are not perfectly able to judge, even after

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<sup>36</sup> See Opening Brief (Dkt. 11-1) at 21.

<sup>37</sup> Other than the conclusory and circular contention that “These customers would not have continued to pay for each shipment if they were not satisfied.” Opening Brief at 22.

<sup>38</sup> Matthew G. Nagler et al., *How Do Consumers Value a Credence Good?*, available at [www.cide.info/conf/2009/iceee2009\\_submission\\_39.pdf](http://www.cide.info/conf/2009/iceee2009_submission_39.pdf) (“Medications conform well to the credence good model.”).

they consume it, due to both the nature of the product as well as unequal access to information.<sup>39</sup> “Expert services, such as medical procedures and car repairs, offer the archetypal examples.”<sup>40</sup> It bears emphasizing that consumers are unable to fully evaluate credence attributes or credence goods—“includ[ing] the therapeutic value of a medicine”—*even after purchase*.<sup>41</sup> And marketing experts have pointed out that “deception about these [credence] attributes would not necessarily cause consumers to take their business elsewhere . . . .”<sup>42</sup> This is because, in the case of credence goods, “effectiveness [is] not fully observable even after purchase and use . . . [so] consumers will continue to rely upon the same observable sources of information to make decisions about repeat purchasing . . . .”<sup>43</sup> In this case, the

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<sup>39</sup> See Phillip Nelson, *Information and Consumer Behavior*, 78 J. POLITICAL ECON. 311 (1970).

<sup>40</sup> <sup>40</sup> Matthew G. Nagler et al., *How Do Consumers Value a Credence Good?*, available at [www.cide.info/conf/2009/iceee2009\\_submission\\_39.pdf](http://www.cide.info/conf/2009/iceee2009_submission_39.pdf).

<sup>41</sup> See e.g., Richard Craswell, *Interpreting Deceptive Advertising*, 65 B.U. L. REV. 657 (July 1985) (citing Darby & Karni, *Free Competition and the Optimal Amount of Fraud*, 16 J.L. & Econ. 67, 72-77 (1973)).

<sup>42</sup> Richard Craswell, *Interpreting Deceptive Advertising*, 65 B.U. L. REV. 657 (July 1985).

<sup>43</sup> Matthew G. Nagler et al., *How Do Consumers Value a Credence Good?*, available at [www.cide.info/conf/2009/iceee2009\\_submission\\_39.pdf](http://www.cide.info/conf/2009/iceee2009_submission_39.pdf).

Company's marketing claims and citations to clinical studies "proving" Supple's efficacy are these sources of information.

Supple LLC's argument that the existence of repeat purchasers is evidence of a "prevalence of satisfied customers"<sup>44</sup> assumes, erroneously, that purchasers are able to uncover deception following their initial purchase. However, Supple LLC is unclear how repeat-purchasing would more effectively reveal to consumers that the glucosamine contained in Supple was not the type the Company cited in studies, or that the ingredients in Supple were not in fact "clinically proven" to be effective in any way for arthritis or joint pain.

Supple LLC's repeat-purchasing theory even fails to demonstrate that customers were satisfied with Supple as a treatment for an individual's joint pain symptoms, due to the "placebo effect" inherent in the use of supplement products and medications. In this case, limited information and consumer deception is further complicated by the placebo effect that causes consumers to believe they are experiencing the expected benefit, by merit of the

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<sup>44</sup> See Opening Brief (Dkt. 11-1) at 39.

expectation itself. Experts in both marketing and nutrition science have confirmed:

In this context, taking pills constitutes an affirmation: the more times one takes a supplement, the more one believes in its efficacy . . . the less dissonance one experiences. Future research should consider further whether cognitive dissonance and its associated behaviors characterize credence good use generally.<sup>45</sup>

So, considering that Supple is a product that consumers are unable to fully evaluate (and are almost wholly dependent on the Company's marketing claims), and that there is a high probability of consumers experiencing some placebo effect, Supple LLC's argument based on repeat-purchasers cannot prevail. Here, the Company's misleading marketing and reliance on consumers' inability to discern benefits meant for the Company that "so long as the falsehood is perfect, consumers will never experience a subjective feeling of having been cheated. But this is of course true for any credence trait."<sup>46</sup>

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<sup>45</sup> Matthew G. Nagler et al., *How Do Consumers Value a Credence Good?*, available at [www.cide.info/conf/2009/iceee2009\\_submission\\_39.pdf](http://www.cide.info/conf/2009/iceee2009_submission_39.pdf).

<sup>46</sup> Roger E. Schechter, *Additional Pieces of the Deception Puzzle: Some Reactions to Professor BeVier*, 78 VA. L. REV. 57 (Feb. 1992).

The Company's marketing of Supple was also based on material "psychic benefits."<sup>47</sup> Throughout Supple's marketing campaign, the Company cited to studies in support of its claim that Supple was "clinically proven effective in treating joint pain."<sup>48</sup>

It is undisputed that "[w]hen an information provider in fact represents that it has support for a claim, that representation may be material to a purchaser."<sup>49</sup>

Further, "[s]uch a representation is likely to be material when the claim for which the alleged support exists . . . pertains to a credence attribute."<sup>50</sup>

This marketing tactic does nothing to shore up the Company's assertion that only satisfied consumers would repeatedly purchase Supple. In fact:

In almost every instance, the psychic component of the transaction involves the sale of a pure credence good. In many cases the consumer has no direct way of finding out—no matter

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<sup>47</sup> E.g., Opening Brief (Dkt. 11-1) at 17.

<sup>48</sup> Opening Brief (Dkt. 11-1) at 41.

<sup>49</sup> Thomas J. Holdych, *Standards for Establishing Deceptive Conduct Under State Deceptive Trade Practices Statutes that Impose Punitive Remedies*, 73 OREGON L. REV. 235, 295 (1994).

<sup>50</sup> Thomas J. Holdych, *Standards for Establishing Deceptive Conduct Under State Deceptive Trade Practices Statutes that Impose Punitive Remedies*, 73 OREGON L. REV. 235, 295 (1994).

how long the product is used, and no matter how many repeat purchases are made—whether the representation that triggers the psychic gratification is true. . . . Moreover, *once the consumer is induced to try the false advertiser's product based on a false representation of a promised psychic benefit, the consumer may have no reason to abandon that brand until some external source brings the falsehood to his or her attention.*<sup>51</sup>

Supple provides no benefit to consumers, and consumers have no way of knowing, or finding out, that the product is useless and that the Company's claims are deceptive. In other words, both because the ingredients in Supple are not effective at treating arthritis and because Supple is a credence good that benefits from the placebo effect consumers experience when taking supplements, classwide deception of consumers is unavoidable here.

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<sup>51</sup> Roger E. Schechter, *Additional Pieces of the Deception Puzzle: Some Reactions to Professor BeVier*, 78 VA. L. REV. 57 (Feb. 1992) (emphasis added).

## CONCLUSION

The judgment of the district court should be affirmed, and the case should be remanded for further proceedings on the merits.

Date: January 22, 2014

Respectfully submitted,

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## STATEMENT OF RELATED CASES

Pursuant to Circuit Rule 28-2.6 of the Rules of the United States Court of Appeals for the Ninth Circuit, amicus curiae Center for Science in the Public Interest states that it is unaware of any related cases.

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## CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on January 22, 2014.

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