Health Fraud and its Implications on Public Health

Protecting General Public Health by Targeting Bogus Claims of Natural Awakenings Detoxified Iodine and Dr. David Perlmutter’s Grain Brain

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Summary: It is often thought that because herbs and dietary supplements are “natural,” they must be marketed and sold legally and that they must be safe and effective and approved for by the FDA. Unfortunately, these assumptions are mistaken. Health fraud comes in all shapes and sizes, even in the guise of natural health products, dietary supplements, and natural health diets. In this paper we address two specific “natural products” that are undoubtedly fraudulent and should be investigated and removed from public consumption. Discussed here are efforts that were taken to address the issue as well as follow up ideas and suggestions that can be helpful for further service action.

Video Link: https://www.youtube.com/watch?v=vcX9LV7CCAg

Health Fraud and the DSHEA Loophole for Natural Products

Fraudulent medicine and health fraud both undoubtedly contribute to increased risk of harm experienced by the patient. They pose a considerable health threat through the following mechanisms: failing to cure, harming, and even killing patients. In basic terms, “health frauds” are scams: deceptive health products that usually claim to have the potential to serve as a quick cure for a wide range of illnesses and ailments. Fraudulent medicine claims to cure a wide range of conditions: weight loss, sexual performance, aches, pains, etc., even serious conditions, such as HIV, AIDS, cancer, etc (FDA, 2014). Usually, companies go to great lengths to advertise these products, such as magazine articles, television paid infomercials, broadcasts on public television, podcasts, representatives, etc.

Adding to the risks of fraudulent medicine is the fact that the current supply chain for medicines and other devices operate at a global level (UNODC, 2014). These basic yet seriously life threatening facts relating to the potential implications of fraudulent medicine have undoubtedly led to discussions, legislations, and other measures to help curtail the effects that such potential health fraud and scam can have on general public health. One manner in which health fraud has been combated has been through participation of serious discussion in the international forum through the use of the United Nations Office on Drugs and Crime, which have led to international discussion and a call for coordinated responses (UNODC, 2014). In paragraph 9 of Resolution 20/6, it is noted that the UNODC, in conjunction and cooperation with other UN bodies and internationally well-known organizations, such as the World Health Organization
WHO) and the International Narcotics Board (INCB), assist “member states” in orchestrating efforts to disrupt and take down not only fraudulent medicine/medical devices, but also to dismantle any potential organized crime groups participating in any stage of illegal supply chains in the distribution of medicine, especially when it comes to trafficking.

**Domestic Approach to Approaching Health Scam and Medicinal Fraud to Protect Public Health - SA**

The issue of fraudulent medicine is an issue that has also been tackled at a domestic level for over 100 years. Early in the 20th century, the United States observed the importance of regulating drugs and medicine within the national level. In 1906, the Federal Food and Drugs Act made drug regulation within the reach of federal law. This version of the 1906 Act prohibited the sale of tampered and mislabeled drugs. Later in the 20th century, in 1938, the United States Congress required that newly developed drugs should be approved and reviewed for safety. Later in 1962 the FDA law was amended so that manufacturers are required to show that their drug products are both effective and safe. Currently, according to FDA regulations, new drugs are required to have an approved application in order to continue marketing (FDA, 2014). That means that prior to marketing, drugs have to be shown that they are both safe and effective. Currently, the FDA’s current system of drug approval oversees that drugs and medicine are both safe and effective.

According to the FDA, health fraud drug products are “articles of unproven effectiveness that claim to treat disease or improve health.” Health fraud scams refer to products that claim to prevent, cure, treat, alleviate, or improve health conditions but are not proven. Not only that, but also, as previously mentioned, health scams can lead to delay of proper treatment and can potentially cause lethal injuries. At present, removing these types of products is one of the FDA’s main goals (FDA, 2014). In the past few years, FDA laboratories have found more than 100 weight loss products that were marketed and sold as (illegally) dietary supplements. An example of this was in the prescription weight-loss drug Meridia. It was withdrawn from the U.S. market after it was shown through research studies that it was associated with high levels of heart attack and stroke (FDA, 2014). Though health fraud is pervasive, it must be noted that according to the FDA, making claims about a drug or a medical device without FDA approval is illegal (FDA, 2014).

**Limitations of Federal Regulation - AA**

Although the FDA is an effective mechanism that the United States uses to regulate certain products, the limitation of the FDA lies in the fact that it only regulates certain products. According to the FDA, the following products are regulated: foods (safety and truthful labeling, game meat, bottled water, additives, infant formulas), human prescription and non-prescription drugs, vaccines (and other Biologics), medical devices, electronic products, cosmetics, and some veterinary products (FDA, 2014). Nowhere do they indicate that they regulate “natural health products” and other dietary “supplements.” In October of 2012, the Department of Health and Human Services issued reports underscoring the need for improved oversight of marketing supplements and natural products (Kabat, 2012). This is an issue because the use of dietary and herbal substances has grown to near exponential levels in the United States. In 2007, the National Center for Complementary and Alternative Medicine reported that $14.8 billion was
spent on non-vitamin, non-mineral, and natural products (Kabat, 2012). Only one third of this was for prescription products that one could pay out of pocket. Survey data from the National Health and Nutrition Survey indicates that between the years 2003 and 2006 one-half of Americans use dietary supplements and one out of every five people use a supplement with at least one botanical ingredient (Kabat, 2012). It is thought by many that because natural products and dietary supplements are bought and sold legally that they must be safe, effective, and regulated by the FDA. Unfortunately, these are only assumptions and these assumptions are without a doubt mistaken. (Kabat, 2012). In 1994 Congress passed the Dietary Supplement Health and Education Act (DSHEA). By defining herbal supplements and other natural products as dietary supplements, DSHEA exempted these products from the rigorous standards that the FDA uses in regulating food, drugs, medical devices, and other products previously mentioned (Kabat, 2012). This proves to be somewhat counterintuitive to the FDA agenda. Though they claim that making medical claims without FDA approval is illegal and against the law, it now seems that natural products can seemingly get away with announcing medical claims on product labels without the same amount of scrutiny that “non-natural” drugs claim. This is undoubtedly an incredibly frustrating issue for a myriad of reasons. Between 1994 and 2008, the number of dietary supplements has jumped from 4,000 products to 75,000 products. In the first 10 months of 2008, the FDA received at least 600 reports of adverse effects, including death, related to these natural products. The FDA, however, believes that these cases are underreported and estimate that at least 50,000 events occur annually. This limitation of the FDA is quite alarming, even though they have proven to be effective for other products besides natural health products and dietary supplements. Because these products are not regulated, and because natural health products can make medical claims without FDA consent, it is imperative that measures be taken against these products. An example that brings light to the importance of this limitation is the dietary supplement “5-hour Energy” drink. In their official site, they state that their supplement has to follow DSHEA (5-hour Energy, 2014). It is interesting to note, however, that while following DSHEA 5-hour Energy was linked to 13 deaths in the year 2012. This would later lead to further investigation and more stringent regulation of 5-hour Energy by the FDA (ABC News, 2012). Even if the 5-hour Energy drinks were not directly related to these deaths alone, this incident only proves how limited the FDA is because of DSHEA and how easy it is for potentially dangerous natural products to get into the hands of mass consumption. The only good that can be seen in this scenario is that the FDA will become more stringent at dietary supplement evaluation after reports are filed, but this is also an issue: in order for the FDA to investigate potential dangerous dietary and natural supplements as regular drugs, reports of death, illnesses, etc., have to be filed.

Identifying Health Fraud - SA

Because of federal limitations of the regulation of natural products, it is imperative that we identify and isolate natural products that pose to be fraudulent in the health that it promotes. Before natural health products and dietary supplements are targeted for fraud, certain cues must be recognized and certain approaches must be followed. Currently, the FDA recognizes and acknowledges health fraud scams and has brought to public light measures that should be taken before one considers purchasing and consuming drugs, medical devices, and other products. These measures and suggestions can, without a doubt, be used to approach these types of natural
health products, since natural health products and dietary supplements are being used in modern times as medicine and medical devices.

One tip-off that should be recognized is drug manufacturers claim to cure a wide range of diseases with a single product. Recently in New York, at the FDA’s request, products from a New York firm were collected that claimed that their dietary statements could cure dementia, brain atrophy, atherosclerosis, etc (FDA, 2014). A public testimonial of a product is another factor individuals should be cautious of when purchasing medical products. The reason why public stories should be observed is that it is easy to make up stories about how a drug “cured my diabetes.” Public testimonials like this should not be weighed with more importance than scientific discovery. In addition, medical products that claim to have quick fixes for complication and disease should be perceived with a wary eye because most diseases are not quick to cure. Seldom diseases are cured quickly at such a rapid pace (FDA, 2014). FDA also brings attention to products that claim to be “all natural” (FDA, 2014). Though the FDA cannot regulate natural products vigorously, it does admit that products found in nature can be potentially life threatening. For example, mushrooms that are found in nature can kill when consumed (FDA 2014). In addition, products that claim to be a “miracle cure” or sponsor conspiracy theories against pharmaceutical companies are highly indicative of products that are most likely fraudulent (FDA, 2014).

Adenergy: An Example of Health Fraud - SA

On March 1, 2004, Optimum Nutrition announced the launch of Adenergy, the first sports dietary supplement with “PEAK ATP” (New Hope, 2014). With the techniques that were previously discussed about how to identify a health scam, one can easily ascertain the concept that Adenergy is a complete and utter scam (without the need of understanding the science behind Adenergy) and a waste of people’s time and money. First, it claims to improve physical performance, benefit muscle growth, help strengthen skeletal muscle, support recovery of fatigued and weakened muscle, enhance vascular health, promote blood flow to peripheral sites, and elevate both tissue and blood levels of ATP (Astro supplements, 2013). Without reading too much into the details of this product, Adenergy already raises much doubt to the fact that it could serve as a “miracle cure,” providing various examples of improvements it could bring to one’s life. The most basic science can be used to discredit the validity of this supplement: as soon as ATP is made, it is degraded to ADP. Having more ATP does not mean much: When ATP is consumed and used ADP is formed. This immediately recycles back to ATP and the cycle of recycling a phosphate group continues. ATP is thus unstable. It would not have the ability to pass through cell membranes whatsoever.

In addition to this, Adenergy claims to be “only legitimate ATP supplement in the sports nutrition industry.” It is “backed by real science” and those in search of an energy supplement “need look no further” and that unlike other products “Adenergy actually delivers,” claiming that within two weeks “an increase of over 170 pounds in total lifting volume” will be achieved (Astro supplements 2013). Adenergy seems to credit most of its “success” to PEAK ATP, a “patent-protected” form of ATP (interesting how one can patent a specific form of ATP since essentially ATP performs the same function no matter what form) (New Hope, 2014). PEAK ATP is able to (according to Optimum Nutrition) increase ATP “stools” in the body by PEAK
ATP’s “proprietary regio-selective delivery” which helps it avoid the harsh acidic environment of the upper digestive tract (Astro supplements, 2013). PEAK ATP and Adenergy seems to have resulted from decades of research performed by Dr. Eliezer Rapaport, “the world’s leading authority on ATP,” who states that Adenergy is the only product available that can increase ATP. Again, this is an interesting idea for “the world’s leading authority on ATP” to suggest, since any student in a basic biochemistry courses can tell you that once ATP is in the system, it is degraded to ADP. In any case Optimum Nutrition seems to promise consumers that with the use of PEAK ATP and decades of research from a single solitary doctor, consumers will observe more strength, energy, and lean muscle with the help of PEAK ATP, lactoferrin, caffeine, polyphenols, and catechins (all of these being the ingredients to Adenergy) (Astro supplements, 2013).

It is rather unfortunate that the DSHEA was passed by Congress in 1994. It is almost certain that had natural products, such as Adenergy, been reviewed by the FDA, Adenergy would not be available to the public not only because the science behind what it claims seems faulty, but also due to the way Adenergy presents itself as a “cure all.” As mentioned on the FDA website, it is illegal for products to claim such a wide variety of functions. In fact, FDA regulators are set to remove these types of products from the market. Unfortunately, since Adenergy is a natural product and a dietary supplement, it will not undergo as much scrutiny and regulation as conventional medicine would. Despite this, it is possible to take steps to warn the public about natural products like this. For example, Dietpillreviewing.com has made the effort to warn potential consumers about Adenergy by stating the following “Caution: These statements about ADENERGY have not been evaluated by the Food and Drug Administration. ADENERGY is not intended to diagnose, treat, cure, or prevent any disease” (Dietpillreviewing.com, 2014). This is definitely a step in the right direction. Steps of this nature (or perhaps complaints) must have been taken because as of today, in the year 2014, though Adenergy can be found in various websites, most websites carrying this product has either ran out of Adenergy or are not allowed to carry that product anymore (astronutrition.com, for example) In addition to this, Adenergy seems to have disappeared from Optimum Nutrition’s catalogue. This is somewhat ironic since Optimum Nutrition seems to have spent some time promoting this product, claiming that it would be the only company in the nation to sell this product to various health food stores and health clubs nation wide (New Hope, 2014). Although this may seem as potentially good news, similar natural “copycat” products are appearing in the market place just as products like Adenergy seem to become unavailable for public consumption. One example of this is ATP Creatinol Serum, a dietary supplement that claims to build leaner, more powerful muscles with the help of a new, “radically fused creatinol-o-phosphate,” echoing similar messages as Adenergy, just with different names and somewhat different compounds (Amazon.uk.com, 2014).

**Detoxified Iodine and Natural Awakenings - SA**

Currently in the central New Jersey area a Natural Awakenings branch in Central New Jersey (Milford) is publishing an advertorial promoting the sale of “Natural Awakenings Detoxified Iodine,” a natural iodine supplementation (Natural Awakenings, 2014). In the advert Natural Awakenings claims that through a few drops of “Detoxified Iodine,” one can gain relief from the following ailments: “depression, fibromyalgia, hypothyroidism, hyperthyroidism, radiation, weight gain, lower energy, bacteria, and viruses” (Natural Awakenings, 2014). For a number of
reasons that were just previously discussed, what Natural Awakenings is doing is wrong and without a right sense of ethics. First, it does what the FDA claims is illegal: making a wide variety of claims about its product. Not only does it claim to alleviate a wide array of ailments, but it also claims to alleviate ailments that are completely contradictory in nature. Natural Awakening readers have to really stop and ponder how a natural product, of any kind, could help one gain relief from both hyper and hypothyroidism. Both metabolic malfunctions work in opposite directions: one in terms of hypersecretion of thyroid hormones and the other the hyposecretion of the same hormone. It is hard to imagine how this natural product can not only provide relief for “weight gain” and “radiation,” but it is also hard to imagine how Detoxified Iodine can do all of this and help alleviate two different and opposite forms of thyroid metabolic malfunction. If Natural Awakenings Detoxified Iodine were an actual medicinal drug instead of a natural product, the FDA would have assuredly taken steps to make sure that Natural Awakenings ceased from advertising their Detoxified Iodine product, but the FDA would also most definitely dissolve Detoxified Iodine from public consumption in general, as it had done so in 2012 when a New York firm claimed that their drug could cure dementia, kidney dysfunction, gangrene, depression, etc. (FDA, 2014). Unfortunately, because of the way that natural products and dietary supplements are currently defined by DSHEA, intense regulation of natural products like Detoxified Iodine is not possible.

Not only does Natural Awakenings advertise their topical (applying to the skin) Detoxified Iodine supplement in a manner that treads on potential illegalities, but is also promoting a health supplement product that makes little sense. Of course it already makes little sense that a single dietary supplement can help alleviate counteracting diseases such as hyperthyroidism and hypothyroidism, but the actual idea behind how Detoxified Iodine should work with regards to its composition is faulty at best. According to the ingredients of Detoxified Iodine, it is composed of 1% iodine crystals in ethyl alcohol, or 200ug of iodine per drop (Natural Awakenings, 2014). What this really means is that iodine is reduced to a 1% concentration in 100% ethyl alcohol and then electro-magnetically transmuted in suspension of a mild acidic solution. The amount of iodine in this solution is so dilute that it will not saturate body tissues at all. In addition to this, it has yet to be proven to detox halides such as bromide, fluoride, chlorine, and mercury (The Guide to Supplementing with Iodine, OL). Not only is the amount of topical iodine in Detoxified Iodine questionable, but also utilization of this product without a physician is potentially dangerous. According to the Edgar Cayce’ Association for Research and Enlightenment, Cayce (the doctor who first developed detoxified iodine) stated that when taken internally (not topically as Natural Awakenings directs), detoxified iodine can over stimulate the thyroid gland and the heart. Because of this type of activity that can potentially occur, all forms of detoxified iodine must be taken under the direct supervision of a physician (Edgar Cayce’s A.R.E., OL). It is irresponsible for companies like Natural Awakenings, and others, to advertise such iodine supplements without stressing this important discretion that should be on the labeled bottle of the supplements themselves. The fact that Natural Awakenings does not acknowledge on their product that the creator of Detoxified Iodine stated the importance of physician supervision during application of the supplement is unethical and should be unlawful even though it is only a supplement and not a drug. It can only be deduced that anyone selling this type of product while claiming it can adjust a dysfunctional thyroid, eliminate bacteria, detoxify halides, etc., is performing a scam and is ripping consumers off under false pretenses. Not only that, but without delineating the harms of this supplement properly, Natural Awakenings is
potentially putting consumers of their products at risk, even if they claim that their product is just for topical purposes.

**Are Carbohydrates Causing Neurological Disorders? – AA**

Dr. David Perlmutter is the medical director of two medical centers, as well as a board certified neurologist and fellow of the American College of Nutrition which he claims to be the only doctor who obtains both titles. He has gained popularity in recent years by advertising his theory on high-carbohydrate (and therefore sugar) diets linked to brain atrophy and can lead to neurological disorders, such as Alzheimer’s disease, Parkinson’s disease, and multiple sclerosis. He also goes even further to claim that carbohydrates are not only at the root of major neurological disorders, but cancer, heart disease, anxiety, and other psychological disorders. He publicizes this medical theory through his television broadcasts, “Brain Change,” and his NY Times best-selling book, *Grain Brain*. The major points of his medical theory is that a component of gluten, zonulin, is the cause of these disorders and that carbohydrate and sugar intake needs to be aggressively decreased and regimented. We will investigate such claims.

Dr. Perlmutter derives his anti-carbohydrate theory from a recent finding made by Dr. Alessio Fasano, who discovered the molecule zonulin. Zonulin is released by gliadin, which is a component of gluten. Zonulin binds to enterocytes, or absorptive intestinal cells, and regulates the opening of their tight junctions. This opens the space between mucosal cells to flush out toxins. This in turn increases intestinal permeability, which leads to allergic, inflammatory, and autoimmune diseases. Basically, the more zonulin that binds to enterocytes and the more frequently that it does so will increase permeability and increase risk of disease. According to Fasano’s research, “zonulin and CXCR3 (a receptor for gliadin peptides) are over expressed in the intestinal mucosa of patients with celiac disease and autoimmune disease” (Pizzorno, 2013). Dr. Perlmutter over-exemplifies this evidence by focusing on symptoms of such diseases and claiming that carbohydrates are the direct cause for these degenerative diseases, regardless of medical history and current health. His research also determined that tight junctions are dynamic and are subject to change with a number of factors including dietary parameters, so that disease can be maintained and even entirely prevented if the proper (or rather, his) advised diet is followed. Dr. Perlmutter reflects these points through his own theory, yet he fails to identify a key factor – “there is a wide range in response among those reacting to gliadin: some may have only minimal changes in the intestinal epithelium and no obvious symptoms, others may have severe damage to the lining of the intestine, and still others may suffer autoimmune reactions throughout the body” (Pizzorno, 2013). So although this is a groundbreaking find with substantial supporting scientific and experimental data, reactions differ for everyone primarily based on their genetic makeup. To falsify this fact by exclusion is misinformation of medical science, and even worse so to be broadcasted on public television. Every person is genetically unique and thereby has different dietary needs and metabolic rates. This possesses grave dangers for those who follow the lead of Dr. Perlmutter without the consultation of a physician. The
implications of such irresponsible medical practitioners are severe; misrepresentation of medical devices and services is a felony. Beyond legal consequences it is regretful that a medical practitioner, whose main purpose is to save lives, would risk the lives of Americans nationwide for notoriety and profit.

There is also substantial evidence of many cultures with high diets in carbohydrates and natural sugars, such as fruits and honey, thriving with very little western disease. The Hadza of Tanzania and the Kuna of Panama obtain a high percentage of their total calories from foods that are high in natural sugars, such as fruit, starchy tubers and honey, yet are lean, fit, and free of modern diseases. “Despite a fair number of elderly residents, none of whom showed signs of dementia or poor memory, the only cases of sudden death they could recall were accidents such as drowning or falling from a coconut tree” (Lindeberg, 2010). The Tukisenta in the Papua New Guinea highlands have a diet that is over 90 percent carbohydrates and the Okinawans of Japan have a diet that is largely comprised of sweet potato. The Kitava in the Pacific Islands have a diet predominantly composed of papaya, yams, and banana that is 69 percent carbohydrate. “Less than 0.2% of the caloric intake came from Western food, such as edible fats, dairy products, refined sugar, cereals and alcohol, compared with roughly 75% in Sweden” (Lindeberg, 2010). This statistic should be most shocking to those of us belonging to Western culture, as this is an incredible percentage of food that is consumed from the portion of our food group that most know to “use sparingly.” The most well known are the Greeks, particularly from islands like Crete, and other Mediterranean diets that are centrally comprised of grains. In all these societies, there is very little degenerative cardiac or neurological disease. Therefore it is not carbohydrates in general that is the enemy, but the kinds of carbohydrates and our potential sources of good carbohydrates that we need to focus on.

As part of his claims of carbohydrate madness, Dr. Perlmutter argues that the amount of carbohydrates that we consume are directly contributing to and even accelerating progression of Alzheimer’s disease. Jennifer L. Bayer-Carter of Veterans Affair Puget Sound Health Care System notes that their study supports evidence that “consumption of a diet high in saturated fat and simple carbohydrates may contribute to pathologic processes in the brain that increase the risk of Alzheimer's disease. Conversely, diets low in saturated fat and simple carbohydrates may offer protection against Alzheimer's disease and enhance brain health” (Hahn et al., 2010). The diets were labeled LOW and HIGH, representing the amount of simple carbohydrates and saturated fats in the diet. After just four weeks into the study, samples from cerebrospinal fluid resulted in decreased biomarkers for Alzheimer’s disease. The authors of the article from the Friedman School of Nutrition Science and Policy at Tufts University also stress the importance of a diet similar to the “Mediterranean diet,” as mentioned above. From this study, it is evident that Dr. Perlmutter has yet again exaggerated and concealed medical knowledge. He repeatedly and aggressively claims that all carbohydrates and sugars are the root and direct cause of degenerative neurological disease. It is shameful that a doctor would create nationwide urgency
without specification of which carbohydrates are contributing to increased risk of Alzheimer’s disease.

Part of the problem of Western disease is that Western societies are fixated on curing disease while unconsciously and simultaneously perpetuating the disease with poor diet and life habits. Education of diet and disease is of paramount importance to thrive in our modern society, but if we are so concerned with preventing the disease or keeping it in check, we are losing out entirely on what examples and studies are of great importance such as which societies are currently maintaining a healthy, balanced diet.

The Placebo Effect: a Partner of Health Fraud - AA

The power of the mind is an incredible phenomenon. There is a saying that anything can be achieved by putting “mind over matter,” meaning that the strength and resiliency of the mind is greater than that of physical limitations and that a single belief can be substantial enough to overcome any obstacle. The placebo effect is the epitome of this notion. A placebo is defined as “an epithet given to any medicine adapted more to please than benefit the patient” (Moerman, 2002). Although a controversial topic that comes with advantages and disadvantages, there have been noted studies of its incredible strength on the human psyche including the most trivial details. “Further, the color of a drug does seem to influence its effectiveness: in one study, patients who took blue pills fell asleep faster and slept longer than patients taking orange pills” (Haug, 2011). The simplicity of the color of pills contributing to the prescription’s efficacy is but one of many examples that impact patient recovery or stability of health.

More importantly than the qualitative attributes of the drug or the environmental context that the patient is present in is the concept of aliefs. Aliefs are “mental states with associatively linked content that is representational, affective and behavioral, and that is activated—consciously or nonconsciously—by features of the subject’s internal or ambient environment” (Gendler, 2008). Aliefs are habitual and automatic notions that may support a current belief or entirely oppose it. For example, a person watching a sad movie may believe that the characters are entirely fictional, but his aliefs may lead him to grieve for them anyway. In this context, this is extremely powerful in terms of advertising techniques for health care products and services, playing into the naivety of the public who are unwittingly searching for cures to their ailments. If the patient or prospective consumer considering treatment immediately have positive associations with the presentation of the advertisement, according to Gendler’s theory, they are automatically more willing to believe that the treatment will produce a successful outcome. Medical practitioners such as Dr. Perlmutter and companies such as Natural Awakenings have manipulated the notion of aliefs. Presentation of these services appears to be the key theme related between the two parties. Dr. Perlmutter highlights the portions of his argument that are based on medical science, excluding any evidence of counter theories. Broadcast a doctor with knowledge of medical science few have heard of in front of a studio audience and the interpretation portrayed image is this: the public is lead to believe that this broadcast of new medical knowledge must be on television because he has discovered urgent scientific knowledge, and people are in the audience as supporters of these scientific theories because they too have realized the veracity of his words. Natural Awakenings chooses words such as “natural,” “a must for most Americans,” and “a few drops can change your life!” They also have many comments from consumers praising their
successes and expressing their wildly improved health conditions after consuming the miracle product, furthermore as a means to ensure they gain the trust of the public. The crafty yet cunning selection of these words in their advertisement along with Dr. Perlmutter’s broadcast directly exploits the immediate and innate aliefs of the unassuming public to trust in the effectiveness of these claims.

This theory of aliefs influencing and underlying current beliefs is easily exemplified by two recent studies examining the implications of certain marketing tactics and customer satisfaction due to product quality. In one study by Irmak, Block, and Fitzsimons (2005), the efficiency of products was measured by motivation and expectancy of results of consumers. The proctors of the study asked questions such as if the consumer would like to increase their health benefits, and the consumers could agree or decline by submitting a written response. The results of the study concluded that those who already wanted the product to have successful results received exactly that, and contrastingly those who had no faith in the product efficiency saw no changes. Part of what makes the marketing tactics of Natural Awakenings so powerful is the pre-existing desire to improve one’s health, while simultaneously relating to the presentation of the advertisement. Although these advertisements are for ineffective, unregulated supplements and misinformed medical information, respectively, their efficiency can still be falsely induced by the consumer’s willingness to want to be cured. In another study by Shiv, Cameron, and Ariely (2005), the efficacy of products, in this case an energy drink, is investigated based on the price that is marketed. The results of the group that was advertised products at a discounted price yielded “judgments of lower quality [and] a less favorable consumption experience.” As indicated on many local PBS websites, the minimum donation to PBS to receive Dr. Perlmutter’s DVD is $60 and to receive the DVD along with his book and other resource is $144. For the DVD alone, this is a tremendous amount of money for one DVD compared to the standard price of DVDs today that range from $15-30. One bottle of Natural Awakenings Detoxified Iodine supplements is 0.5 ounces that lasts 4-6 weeks and costs $19.99. This is simply too costly for 0.5 ounces of a product that is supported by medical science to have no effect on one’s health. As reinforced by Shiv, Cameron, and Ariely, the price alone of these products can convince those who are willing to improve their health because higher price indicates higher quality of treatment. From a marketing, economical, and psychological perspective, Natural Awakenings and Dr. David Perlmutter are manipulating the public by playing into their desires to improve their health.

Community Action: Tackling Natural Awakenings and Dr. Perlmutter

Addressing Natural Awakenings Detoxified Iodine - SA

In 2012, 33 hospitalizations, 13 deaths, and other reports and claims linked to 5-hour Energy led the impetus for the FDA to conduct investigations of the dietary supplement. Though DSHEA prevents initial stringent regulation of dietary supplements, it seems that the FDA is able to conduct investigation of dietary supplements after the product is released for public consumption. It is with this logic that led us to file a complaint to the FDA.

The following text was inserted in the “Problem or Concern about this Website” tab:
“Currently, a Natural Awakenings branch in Central New Jersey (Milford) is publishing an advertorial promoting the sale of “Natural Awakenings Detoxified Iodine,” a natural iodine supplementation. This advertisement can also be seen when one enters the Natural Awakenings website. In the magazine website/magazine itself, Natural Awakenings is selling its own brand of "Detoxified Iodine." Natural Awakenings claims that through a few drops of their "Detoxified Iodine," one can gain relief from the following ailments: “depression, fibromyalgia, hypothyroidism, hyperthyroidism, radiation, weigh gain, lower energy, bacteria, and viruses.” It is incredulous to believe that this product is capable of all this. Simple science points to the direction that drops of a topical 1% concentration of detoxified iodine in a 100% ethyl alcohol solution will not be enough to saturate body tissues nor detox tissues from halides. In addition to this, Natural Awakenings seems to be promoting a potentially life threatening product. Not only is the amount of topical iodine in Detoxified Iodine questionable (and thus a waste of money), but also utilization of this product without a physician is potentially dangerous. According to the Edgar Cayce’ Association for Research and Enlightenment, Cayce (the doctor who first developed detoxified iodine) stated that when taken internally (not topically as Natural Awakenings directs), detoxified iodine can over stimulate the thyroid gland and the heart. Because of this type of activity that can potentially occur, all forms of detoxified iodine must be taken under the direct supervision of a physician. It is irresponsible for companies like Natural Awakenings, and others, to advertise such iodine supplements without stressing this important discretion that should be on the labeled bottle of the supplements themselves while claiming to cure and alleviate a wide array of ailments and metabolic disorders. Natural Awakenings is seriously breaching good ethics and we hope that awareness is taken of these facts.”

As of now, we are still waiting for their response. The fact that it has been some time since we have heard anything from the FDA, this convinces us that one complaint/report probably is not enough. When reflecting on how investigations were induced for 5-hour Energy, it comes to our attention that it took over 30 complaints/reports, even several deaths and hospitalizations, for any course of action to be taken by the FDA. Though at present there are not any deaths/serious injuries related to Detoxified Iodine that can be brought to our attention, perhaps a way to bring awareness to the potential danger and the clear lack of ethics expressed by Detoxified Iodine can be brought about by a newspaper editorial, survey, or other means in which a mass amount of people can recognize that Natural Awakenings Detoxified Iodine is not only fraudulent but also dangerous. If a larger number of complaints are garnered, the FDA cannot help but take notice. We hope that with editorials written to local newspapers and the Rutgers University Targum that we can not only have a publication in a newspaper but we also hope to raise awareness of this matter to the local community.

In addition to this, it was recently discovered that the online publication of Natural Awakenings is released through ISSUU, an online publication. ISSUU publishes works from various magazines and newspapers, including the Rutgers Daily Targum, Natural Awakenings, etc. ISSUU claims that they do not distribute publications that they deem “unlawful” or “inappropriate” (ISSUU, 2014). It is both unlawful and inappropriate to not only advertise a product that should require physician assistance but also does not provide consumers of this product proper warnings and recommendations. We have contacted various departments of ISSUU (Press & Media, Sales & Partnerships, Legal Inquiries, Help & Support, and Careers). We hope that within the near future that ISSUU acknowledges the seriousness of this matter.
Actions Taken Against Dr. David Perlmutter – AA

As done for the Detoxified Iodine supplements, a report has been filed against Dr. David Perlmutter and submitted to the FDA for his misinformation of medical knowledge to the public. Although the FDA notes on their website that they cannot simply address every individual email, they will evaluate every complaint made. Therefore, with more support for this cause by more people reporting against these organizations, the process will move along more quickly. The following posting was submitted to the FDA via their “Report a Scam” form and was also included to the daily Targum at Rutgers University to raise awareness locally. The message submitted was also submitted to the PBS ombudsman, Michael Getler, who works for PBS as an independent internal critic in order that PBS upholds its own standards of editorial integrity:

“In his television special, “Brain Change,” Dr. David Perlmutter advises against consumption of carbohydrates and sugar to protect against brain diseases. He is a strong proponent against the consumption of wheat products, as he believes leads to degenerative neurological and cardiac disease. These advertisements, although having some medical validity, are predominantly exaggerating ailments to these cures and are excluding counter arguments to these theories. This is medical misinformation to the public and must be investigated.”

Besides reporting this medical scam through the FDA, we have taken further action against Dr. Perlmutter. PBS is the broadcasting network that broadcasts Dr. Perlmutter’s television special that advertises his “groundbreaking” DVD set, “Brain Change.” They air his special multiple times a day (alarmingly) nationwide. They have been contacted at their headquarters for breaching their own Editorial Standards and Policies. PBS clearly states in their Editorial Standards and Policies a section entitled “Editorial Integrity: PBS content should embrace commitment to excellence, professionalism, intellectual honesty and transparency. In its news and information content, accuracy should be the cornerstone” (PBS, 2013). We have contacted Mr. Getler at his personal line many times and are still awaiting a returned response. We hope PBS acknowledges this matter based upon the inaccuracy of Dr. Perlmutter’s claims and that it is illegal to misinform the public of medical knowledge and medical services or products.

Although through several attempts to contact the FDA and attain some headway at the PBS headquarters, we have yet to receive a response from these organizations. The lack of urgency from both parties is alarming, as this representation of medical science is not entirely factual and does not encompass the full scope of the topic. We are concerned for public health, as incorrect knowledge is easy to spread (in this case, even easier, being that it is broadcasting on public television), but difficult to correct and reeducate. Further attempts will proceed if our messages are not being perceived as substantially urgent.

Public Outreach – SA, AA
Looking at our previous results, it was then decided that perhaps a public outreach attempt would bring out results. With concern to Detoxified Iodine, it looks like FDA response is not likely since Natural Awakening’s Detoxified Iodine does not pose as a massive public crisis (in addition as to no reports of deaths related to this dietary supplement), nor is it likely that the online publishers of Natural Awakenings will respond to complaints against their own publications. The first step in public outreach will be taken in the following manner: posting questions on public forums on the internet to start a discussion.

The following post and answer was observed on the “yahooanswers” website with respect to Natural Iodine.

“Question: Does Natural Awakenings' Detoxified Iodine actually work?

I was just curious because I'm contemplating on buying it... here's a link to it

Answer: I’m sorry, but this:

"The process involves electrically charging naturally occurring iodine so that the raw form is transmuted into the atomic state"

and:

"...sufficient amounts of the vibration of this detoxified iodine could not only adjust a dysfunctional thyroid, but also assist with a host of glandular imbalances as well as eliminating bacteria, fungi, and viruses..."

is complete, pseudoscientific, hogwash. Avoid.”

The following post and answer was observed on the “yahooanswers” website with respect to Dr. Perlmutter:

“Question: Should I limit or even eliminate carbohydrates and sugar from my diet as Dr. David Perlmutter suggests?

I recently saw Dr. David Perlmutter's special Brain Change on TV. He says that carbohydrates and sugar are directly causing Alzheimer's disease and diabetes and that carbs and sugar need to be very limited in the diet. I want to become more healthy and am considering this diet. Any thoughts? Is he right?

He has a website: http://www.drperlmutter.com

Please help!
Answer: I am diabetic myself and I try to keep up in new developments and new thinking. I think the current feeling in the scientific community is that there is certainly a connection between carb consumption and the onset of type 2 diabetes, but it's not known if it's a causal connection. Perhaps a person's love of sweets and starches is caused by the same genetic condition that makes them more susceptible to diabetes.

Anyway, there seem to be lots of ideas for dieting, and you'd think if any of them really worked, we wouldn't have so many of them!

But the low-carb approach seems to work best. I was on a low-carb mailing list for a while and people reported not just losing weight but feeling better, skin clearing up, less joint pain, all kinds of good results! And I have to say it's worked pretty well for me too!

But there's a couple of things that go with any diet.

1. We think of diet as a temporary regimen to reach a target weight. Then we go back to our old ways and the weight all comes back. It's healthier to carry around an extra 10-20 lbs than to go up and down. So 'diet' should mean a permanent lifestyle change. This means we stay away from extreme 'fad' diets, we make changes slowly, and only those we can commit to as permanent.

and

2. Diet and exercise are two sides of the same coin. Both help, of course, but neither is nearly as effective by itself. If you measure your own blood sugar (as we diabetics do these days) you can really see this happening! I was never an exercising kind of person, but when I was diagnosed with diabetes my Dr. convinced me of the importance of it. It wasn't necessary to go to the gym and huff and puff and sweat like a pig. He suggested just going for a 1-hr walk after dinner. Which I tried, and almost immediately got addicted to it! Then I discovered bicycling and now I do maybe 10 miles 3-4 times a week. I listen to audiobooks on my phone, and these days I look forward to my walk or bike ride, to hear the next part of the story!

With low-carb diet and 'moderate' exercise I've lost about 35 lbs and I have no trouble keeping it off! That's the way to do it.

One more thing. I looked into the Atkins diet, the 'brand name' low-carb diet, and it's really very extreme! I'm guessing Dr. Perlmutter has a regimen all laid out for you, and that is his justification for writing a book or selling a program on CDs or whatever. But all you really have to do is find carbs in your diet and eliminate them. That means, for instance, sandwiches on one slice of bread, no more than two or three mouthfuls of cake or pie or ice cream, no sugary soda, avoiding potatoes/rice/bread/pasta, stuff like that. It doesn't mean you can't have ANY, just that you treat these things with the proper respect. It's not a 'plan', it's just common sense.'

As can be seen, this approach of reaching out to the public for the issues at hand seems to have been positive. The responses were both direct and thorough. More steps of addressing the public in this manner shall be taken in the near future.
While steps were being taken to approach the public via yahooanswers, PBS finally responded to one of our emails. The following is the email sent to PBS.

> From: <Redacted> [mailto: <Redacted>
> Sent: Wednesday, April 23, 2014 8:12 AM
> To: Ombudsman
> Subject: PBS Ombudsman Feedback
> <Redacted>
> [firstname] = Ashley
> [lastname] = A.
> [city] = New Brunswick
> [state] = NJ
> [message] = There are some doctors and companies that are advertising their theories for cures of major disorders through DVDs, books, diet plans, supplements - the list goes on. These are what the FDA calls "health care scams" and it is illegal.
>
> Dr. David Perlmutter and his television special Brain Change, aired on your network, in which he advises against consumption of carbohydrates and sugar to protect against brain diseases. These advertisements, although having some medical validity, are predominantly exaggerating ailments to these cures.
>
> As stated above, any health care scam is illegal and can actually be reported through the FDA website at this link: http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm. Even though they can't respond to every individual email, they will evaluate every complaint made. Therefore, with more support for this cause by more people reporting against these organizations, the process will move along more quickly.

The following email was how PBS responded.

> Date: Wed Apr 23 15:24:46 EDT 2014
> From: "Ombudsman" <ombudsman@pbs.org>
> Subject: RE: PBS Ombudsman Feedback
> To: "<Redacted> " <Redacted>
>
> Thanks for writing. You are not alone. I've written several times about these programs. The Brain Change is not distributed by PBS. It is distributed by an outfit called Executive Program Services that is licensed to distribute material to public broadcasters. All PBS member stations are independent and can air whatever they choose and some choose to use these programs from EPS. Here's a link to a column that mentions Dr. Perlmutter down in the letters and also has links to earlier columns and also reiterates my suggestion to PBS that they make clear they have nothing to do with these kinds of programs. http://www.pbs.org/ombudsman/2014/01/the_mailbag_a_downton_downer_and_other_things.html

In the link that was provided by Ombudsman, the following text can be read:
I am an endocrinologist associated with Harvard Medical School. Several days ago, I watched the program featuring Dr. David Perlmutter and was appalled by its content. The measures he advocates, a radically low carbohydrate diet and gluten aversion to avoid Alzheimer Disease, diabetes, etc., have no standing in the scientific community and there is massive evidence to the contrary. Worse he offers sufferers of these distressing illnesses a false path to health, which is hardly a public service. I cannot imagine why this program was selected for a PBS special.

David Singer, Cambridge, MA

The response given by PBS is twofold. On the positive side, it is great to see that we are not the only individuals who have raised issues about David Perlmutter and his program to PBS. On the downside, although PBS claims to have nothing to do with these types of programs, PBS still chooses to air Dr. Perlmutter’s program at a regular basis. The fact does not change that by broadcasting fraudulent information, and thereby committing action deemed illegal by the FDA, PBS should be held responsible. Because of this, we have produced another video which will be uploaded to youtube shortly to raise awareness to this subject.

Contact Information

FDA Complaint Report Contact Information
Consumer Complaint Coordinators for NJ: 973-331-4998
http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm

Contact Information regarding David Perlmutter:
David Perlmutter M.D. 800 Goodlette Rd North #270 Naples, FL 34102
media@DrPerlmutter.com

PBS Contact Information
Public Broadcasting Service 2100 Crystal Drive Arlington, VA 22202
Michael Getler, Obudsman of PBS
Personal Line: 703-739-5290
Submit Your Comments: http://www.pbs.org/ombudsman/feedback.html

ISSUU Contact Information
http://help.issuu.com/anonymous_requests/new

References


6 Tip-offs to Rip-offs: Don't Fall for Health Fraud Scams
http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm341344.htm

**TRAFFICKING IN FRAUDULENT MEDICINE**

What are unapproved drugs and why are they on the market?
http://www.fda.gov/aboutfda/transparency/basics/ucm213030.htm

*Natural Does Not Mean Safe*
http://www.slate.com/articles/health_and_science/medical_examiner/2012/11/herbal_supplement_dangers_fda_does_not_regulate_supplements_and_they_can.html

**5-hour Energy Drinks Cited in 13 Deaths**

**Frequently Asked Questions About 5-hour Energy Shots**
http://www.5hourenergy.com/QandA.asp
Dear Jennifer Amato,

I want to share with your readers the importance of being aware of health fraud scams as it relate to natural products and dietary supplements. Please consider publishing my letter for the North/South Brunswick Sentinel. Feel free to contact me with any questions at <Redacted> or through my cell phone number at <Redacted>. I hope to hear from you at your earliest convenience. Thanks, Shawn Ahmad Chaustre

Fraudulent medicine and other medical devices can both undoubtedly contribute to increased risk of harm experienced by the patient or consumer. They pose a considerable health threat through the following mechanisms: failing to cure, harming, and sometimes even killing the product consumer (patient). According to the FDA, health fraud drug products are “articles of unproven effectiveness that claim to treat disease or improve health.” Though the FDA is effective in removing fraudulent medicine and drugs, natural products can seemingly get away with announcing medical claims on product labels without the same amount of scrutiny that “non-natural” drugs claim. Between 1994 and 2008, the number of dietary supplements has jumped from 4,000 products to 75,000 products. One can only imagine the potential danger the public faces without proper conventional regulation.

Currently, a Natural Awakenings branch in Central New Jersey (Milford) is publishing an advertorial promoting the sale of “Natural Awakenings Detoxified Iodine,” a natural iodine supplementation. In the advert Natural Awakenings claims that through a few drops of...
“Detoxified Iodine,” one can gain relief from the following ailments: “depression, fibromyalgia, hypothyroidism, hyperthyroidism, radiation, weight gain, lower energy, bacteria, and viruses.” Though it sounds quite incredulous that this product is capable of all this, simple science points to the direction that drops of a 1% concentration of detoxified iodine in a 100% ethyl alcohol solution will not be enough to saturate body tissues nor detox tissues from halides. In addition to dietary supplements, fraudulent medical advising that promotes a certain health lifestyle is also another danger that should be looked into due to lack of ethics. Currently, Dr. David Perlmutter advises readers in his book “Grain Brain” against a diet involved in the consumption of carbohydrates and sugars to protect individuals against brain diseases. Though Dr. Perlmutter’s methods seem to have a certain degree of medical backing, most of his claims are grossly exaggerated and serves as a disservice to those actually suffering from the types of ailments that Perlmutter attempts to alleviate.

Health care scams of these types is without a doubt illegal. It should be reported through the FDA website at this current weblink: [http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm](http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm). With more support for this cause, the process of protecting the public from these types of medical shams and bringing awareness to this important issue will be facilitated.

Letter to the Editor: Ashley
Targum Editor: Alexandra R. Meier
eic@dailytargum.com

Dear Alexandra R. Meier,

Please consider publishing my post in your online newsletter or newspaper. Please feel free to contact me with any questions you may have at ashleyal@eden rutgers.edu or my cell phone <Redacted>. I look forward to hearing from you!

Thank you for your consideration,

Ashley Alphonsus

I’m sure that everyone has seen at least one infomercial and thought, “Wow, is this for real? There’s no way this product works!” Unfortunately, this happens in the medical world regarding services, theories of better health, and cure-all supplements. Of course we can spot an outrageous claim right from the start, but what if they’re very convincing? There are some doctors and companies that are advertising their theories for cures of major disorders through DVDs, books, diet plans, supplements – the list goes on. These are what the FDA calls “health care scams” and it is illegal.

I have done my own research on two advertisements for major cures: Natural Awakenings magazine for their Iodine deficiency supplements and “Dr. Oz-approved” Dr. David Perlmutter and his book Grain Brain in which he advises against consumption of carbohydrates and sugar to protect against brain diseases. These advertisements, although having some medical validity, are predominantly exaggerating ailments to these cures.

As stated above, any health care scam is illegal and can actually be reported through the FDA website at this link: [http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm](http://www.fda.gov/Safety/ReportaProblem/ucm059315.htm). Even though they can’t respond to every individual email, they will evaluate every complaint made.
Therefore, with more support for this cause by more people reporting against these organizations, the process will move along more quickly.