

#### **FDA Drug Topics:**

## Fraudulent Products – Hidden Ingredients and Unproven Claims in Products Marketed as Dietary Supplements



Calvin Edwards, MS Health Fraud Investigator



Nicole Kornspan, MPH Consumer Safety Officer

U.S. Food and Drug Administration
Office of Regulatory Affairs
Health Fraud Branch



#### **Objectives**

- Define the health hazards associated with fraudulent products
- 2. Identify the product categories where tainted products are most commonly found
- Describe one of the regulatory challenges associated with fraudulent products
- 4. Summarize how fraudulent products or adverse events related to such products are reported





- Introduction to Health Fraud
- Tainted "Supplements"
- Labeling
- Enforcement Challenges
- Consumer Outreach
- Resources

3



#### Introduction



#### FDA Definition of Health Fraud

- Compliance Policy Guide 120.500: The deceptive promotion, advertisement, or sale of products as being effective to diagnose, prevent, cure, treat, or mitigate disease, or to provide a beneficial effect on health, but which have not been scientifically proven safe and effective for such purposes.
- May be deliberate, or done without adequate knowledge or understanding of the product.





#### Fraud at the Beginning

- 1865-1906: "Golden age" of American quackery
- 1905 estimate: 50,000 patent medicines
  - Drugs were bought and sold like any other consumer good
  - Contain dangerous, addictive, misidentified ingredients
  - Alcohol, cocaine, heroin, opium, without restrictions
  - Did not have to disclose ingredients
  - No warnings about misuse
  - Manufacturer not listed











## FDA

#### **Fraud Now**



























#### **Direct Health Hazard**

Product is likely to cause injury, death or other serious adverse effect when used as directed



Product poses no direct hazard, but consumer is likely to delay or discontinue appropriate medical treatment by relying on the product



#### Dietary Supplement Health and Education Act of 1994



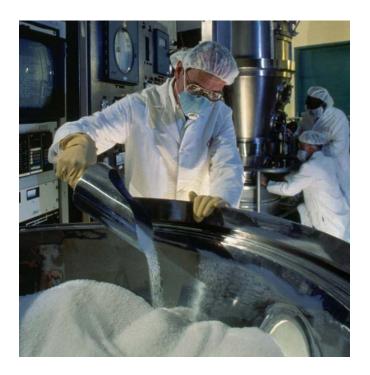
- FDA regulates both finished dietary supplement products and dietary ingredients
- Companies are responsible for evaluating the safety and labeling of their products before marketing
- Dietary supplements are subject to current Good Manufacturing Practices (cGMPs)

9



#### **Good Manufacturing Practices**

- GMP regulations for dietary supplements published in 2007
- Supplements
   manufactured in
   consistent manner and
   meet quality standards





### Tainted "Supplements"



#### **Dietary Supplements**

- Dietary supplements may not contain:
  - Banned or controlled substances like sibutramine for weight loss (pulled from U.S. market for cardiovascular complications) or
  - Bodybuilding drugs like anabolic steroids and their analogues;
     or aromatase inhibitors estrogen blockers
     or
  - Prescription drugs like sildenafil (Viagra); tadalafil (Cialis);
     vardenafil (Levitra); or analogs of these drugs;
     or
  - Corticosteroids, muscle relaxers, NSAIDs to treat pain or drugs to treat diabetes, hypertension or other conditions.

### Tainted "Supplements"



- <u>Tainted Products</u>
   <u>Marketed as Dietary</u>
   <u>Supplements Database</u>
  - Over 1000 products in the database
  - Over 50 different APIs identified
- Transitioning to the new <u>Health Fraud</u> <u>Product Database</u>



Weight Loss



Sexual Performance

13

# Dangerous Drug Levels & Combinations for Sexual Enhancement

- May result in dangerous interactions with Rx drugs
- Adulterants often found in high levels of PDE5 inhibitors or combinations of PDE5s or their analogs



Alpha Male was found to contain aminotadalafil, sulfosildenafil, sulfoaildenafil, sildenafil, hydroxythiohomosildenafil, and dimethylsildenafil



Xzen Platinum was found to contain >300mg/capsule of tadalafil

### Tainted Weight Loss Products-Undeclared Ingredients



#### Sibutramine

- Previously approved in Meridia
- Removed from the market in 2010
- Schedule IV Controlled Substance





### Tainted Weight Loss Products-Undeclared Ingredients



#### Lorcaserin



**DMAA** 















# Dangerous Drug Levels & Combinations for Weight Loss



- Bethel 30
  - Sibutramine –84.2mg/cap
  - Phenolphthalein –88.9 mg/cap
- Consent decree part of DOJ and federal partners Dietary Supplement Enforcement initiative (Nov 2015)

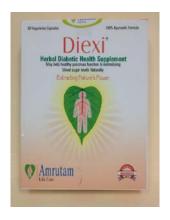




### Other Tainted "Supplements"

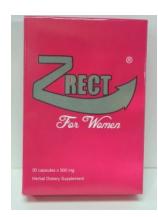












Lovastatin

Diclofenac
Ibuprofen
Naproxen
Indomethacin
Chlorzoxazone
Nefopam

Metformin

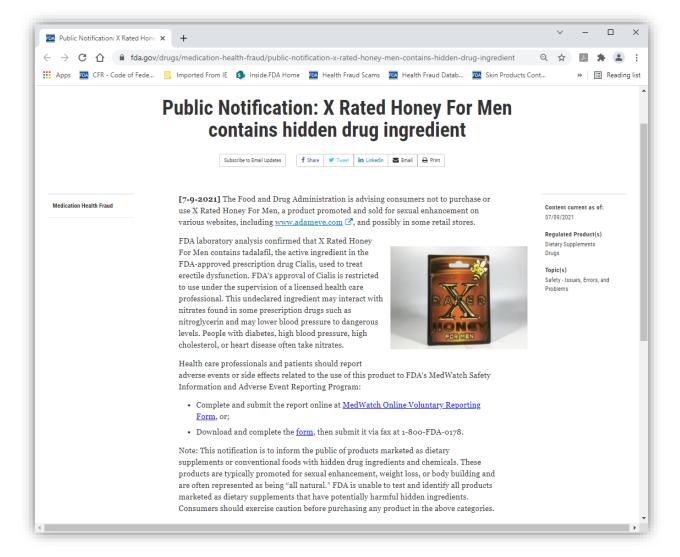
Triamterene

Terazosin

Flibanserin

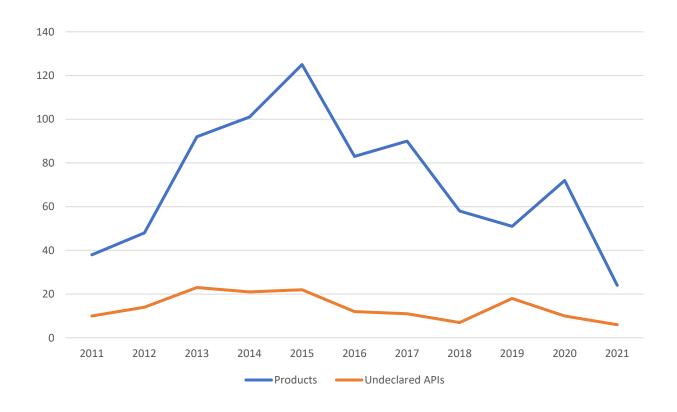


#### Immediate Public Notifications





#### "Supplements" and Undeclared APIs



Number of products added to the FDA <u>Tainted Products Marketed as</u>
<u>Dietary Supplements Database</u> and the number of different APIs found in those products



#### **Other Tainted Products**















### **Unproven Claims**



23

#### **Dietary Supplements**

- Three categories of permissible claims:
  - nutrient content claims
  - health claims
  - structure/function claims
- Dietary supplements may be considered fraudulent when marketed with claims to prevent, treat, or cure diseases or other health conditions, but are not proven safe and effective for those uses.





- "#1 Selling Opiate Withdrawal Brand"
- "Safe and effective natural supplements that work to ease many physical symptoms of opiate withdrawal"
- "Break the pain killer habit"
- "Relieve Your Symptoms...
  addiction, withdrawal, cravings"
- These products are not generally recognized as safe and effective for the referenced uses and therefore FDA considers them "new drugs"



2018 – FDA and FTC take action against companies illegally marketing unapproved products with claims to help with opioid addiction and withdrawal

# Ongoing COVID-19 Response: Operation Quack Hack



- Operation Quack Hack was launched in March 2020 to proactively identify and neutralize threats to consumers
- This cross-agency task force manages and coordinates regulatory actions, civil and criminal enforcement to protect consumers from fraudulent medical products during the COVID-19 pandemic





#### Fraudulent Products — COVID-19





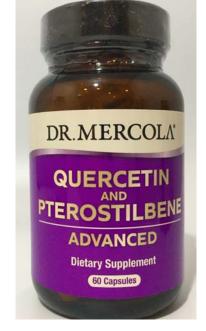


















#### Fraudulent COVID-19 Claims

- Market flooded with various products making unproven claims
- Products are unlawful and put patients at risk

FDA Response	Product Examples
<ul> <li>Conducting ongoing surveillance</li> <li>Issued +190 warning letters to firms selling fraudulent COVID-19 products</li> <li>Majority of firms stopped selling products or took down claims</li> </ul>	<ul> <li>Dietary Supplements</li> <li>Bleach</li> <li>Colloidal Silver</li> <li>Copper</li> <li>Honey</li> <li>Botanical Oils</li> </ul>



#### Fraudulent COVID-19 Claims

- "When it comes to avoiding coronavirus, there are some herbs that have shown promise. These herbs include: . . . Elderberry"
- "Quercetin was initially found to provide protection against SARS coronavirus in the aftermath of the SARS epidemic ... Now, some doctors are advocating its use against SARS-CoV-2..."
- "Simple Silver (Colloidal Silver) with ionic solubility technology is a dietary supplement that has ionic solubility that may supports the Immune system ability to fight off and kill nasty pathogens that can cause illnesses inside and outside the body such as: CORONAVIRUS (COVID-19)... Ideal for dedicated health care professionals working with Covid-19 patients..."



### **Enforcement Challenges**

# Tainted Products at the International Mail Facility



30



- Distributors imported products through mail
  - Rapid screening devices to detect presence of active pharmaceutical ingredients
  - Confirmatory lab analysis

# Tainted Products at the International Mail Facility







IMF at LAX Airport, CA



## Imported COVID-19 Products



"COVID-19 Protection Blend"

Herbal tea claiming to "Fight/overcome Wuhan Corona Virus"



### **Good Manufacturing Practices?**



# Widespread Availability of Tainted Products





34

# Warning about Tainted Products Sold through Online Marketplaces



FDA Warns Consumers to Avoid Certain Male Enhancement and Weight Loss Products Sold Through Amazon, eBay and Other Retailers Due to Hidden, Potentially Dangerous Drug Ingredients

Agency Urges Online Marketplaces, Other Websites and Retailers to Stop Selling These Male Enhancement and Weight Loss Products to American Consumers



The U.S. Food and Drug Administration is warning consumers not to use nearly 50 <u>male enhancement</u> or <u>weight loss</u> products that have been found to contain hidden ingredients and may pose a significant health risk. The FDA purchased these products on Amazon and eBay and agency testing found that the products contain active pharmaceutical ingredients not listed on their labels, including some with ingredients found in prescription drugs. These products may cause potentially serious side effects and may interact with medications or dietary supplements a consumer is taking.



#### Various Sellers/Supply Chains

- One product could be collected from different sellers and tested multiple times
- Which one is tainted?

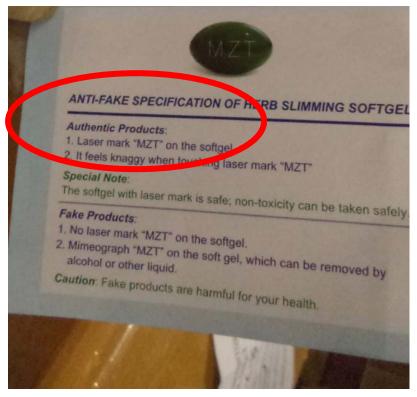




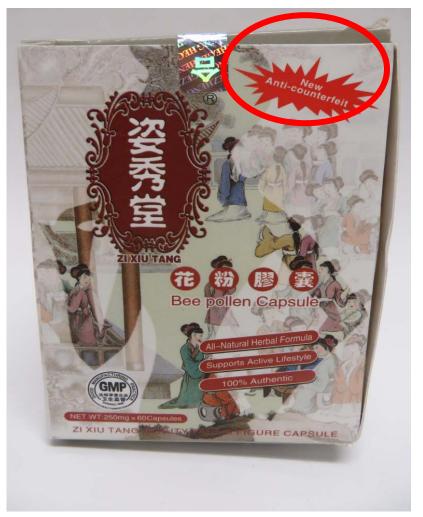
36



## Various Sellers/Supply Chains







# Tainted Products Relabeled – Weight Loss













- Bella Vi Insane Amp'd → XCEL
- Found to contain: sibutramine, phenolphthalein, and fluoxetine

# Tainted Products Relabeled – Sexual Enhancement































Since 2007, FDA has identified over 30 products marketed with variations of the name "Rhino" that contained undeclared API(s).





# Tainted Products Relabeled – Pain Relief











**2015: Stanley Brower of Brower Enterprises indicted** 

- Products marketed as supplements claim to treat arthritis, bone cancer, osteoporosis, and more.
- Dozens of serious injuries reported to FDA;
- Contains at least 3 hidden Rx drugs: dexamethasone, diclofenac, methocarbamol

## FDA

### Reumofan Investigation



#### NEWS

#### Maker of dangerous pain pills is 'ghost' that can't be found

Alison Young USA TODAY

Published 6:06 a.m. ET Sept. 25, 2013 Updated 11:23 a.m. ET Sept. 27, 2013

#### **Story Highlights**

Reumofan dietary supplements contain hidden%2C dangerous medications

FDA has received dozens of adverse event reports%2C including bleeding%2C strokes and deaths

Product labels say Reumofan is made in Mexico by Riger Natural %u2014 but the company may not exist

Some Reumofan pills are stamped with an %22M%22 logo that is the same as one used by Laboratorios Marcel

GUADALAJARA, Mexico — A Mexican dietary supplement called Reumofan has gained a loyal following in the United States as a "100% natural" treatment for arthritis and joint pain. It's supposedly made by a company called Riger Natural from ingredients such as shark cartilage, white willow and glucosamine, or so the labels say.

But consumers who buy Reumofan products are risking dangerous side effects and trusting their lives to a company that uses fake addresses, lies about the ingredients in its products and may not even exist, a USA TODAY investigation has found.

The newspaper set out to find Riger Natural and the people responsible for producing and selling the supplement, searching corporation records and visiting addresses in Mexico where it had been listed on the Web as having a lab. Those addresses are fake and there's no evidence the company ever had facilities in the locations. Some Mexican retailers who once distributed the product say their contacts have simply disappeared. Even Mexican health authorities have been unable to track down the company.







41





- Tainted products almost always a Class I recall
- Almost always voluntary
- FDA oversees company's strategy and assesses adequacy of recall



Kiriko, LLC. Issues Voluntary Nationwide Recall of A1 Slim Due to Undeclared Sibutramine, Phenolphthalein and N-Desmethyl Sibutramine

Kiriko, LLC. Ban hành Quyết định Thu hồi Tự nguyện Toàn Quốc đối với sản phẩm A1 Slim Do có chứa các chất Sibutramine, Phenolphthalein và N-Desmethyl sibutramine Không được Khai báo

### **Enforcement Actions**





Coronavirus (COVID-19) Update: Federal judge enters temporary injunction against Xephyr LLC doing business as N-Ergetics, preventing sale of Colloidal Silver Products for COVID-19



A federal court granted a motion for default judgment & permanent injunction against Xephyr LLC dba N-Ergetics, Derrill Jinks Fussell & Linda Sue Fussell for violating federal law by distributing their colloidal silver products to prevent/treat #COVID19.

District Court orders permanent injunction against companies selling sexual enhancement products containing undisclosed drugs

Former Naturopath Charged Criminally for Trafficking in Misbranded Drugs Claiming They Could Prevent COVID-19







Owner of Pennsylvania Diet Supplement Business Sentenced to 30 Months Imprisonment for Selling Misbranded Drugs as Weight Loss Products over the Internet



#### Science v the Internet



#### **Health Benefits of Vitamin D**



#### Why is vitamin D so important?

One reason is that it helps maintain normal blood levels of calcium and phosphorus – and that's good for our bones! Therefore, it

decreases our chances of fractures, and developing osteoporosis. Studies have even shown that maintaining optimal levels of vitamin D can reduce the risk of 16 different types of cancer! How? By slowing down the production of cancer cells and preventing the formation of new ones.

Vitamin D can help reduce the risk of diabetes, decrease chronic inflammation, lower high blood pressure and lower your risk for Alzheimer's disease.



#### "Infodemic of Disinformation"

- WHO, professional organizations, academic researchers: Beware of the impact of disinformation
  - "Digital Superspreaders"
    - Most common on social media including new platforms, podcasts, streaming events, microblogs, emailed newsletters
    - Misinformation often accompanied with sales for unapproved products





#### Consumer Outreach

## FDA

#### Consumer Outreach

- "Made in the USA" or "FDA Approved"
- Scammers often target people who prefer to shop at nontraditional places, especially those who have limited English proficiency
- Products advertised in ethnic newspapers, magazines, online, infomercials on radio and TV stations or in ethnic stores, flea markets, and swap meets, which may stock products claiming to be from, for example, Latin America or Asia
- www.fda.gov/supplementsafety





- Health Fraud
   Product Database
- Drug Alerts
- Import Alerts
- Press Announcements
- Consumer Updates
- Social Media
- www.fda.gov/health fraud



**FDA\_ORA** @FDA\_ORA · Jan 31

#FDAORA issues advisory letter to Gallbladder Attack for using website to market unapproved drugs making false claims to treat or prevent many diseases, including dementia, cancer, Alzheimer's: go.usa.gov/xnpzY #healthfraud





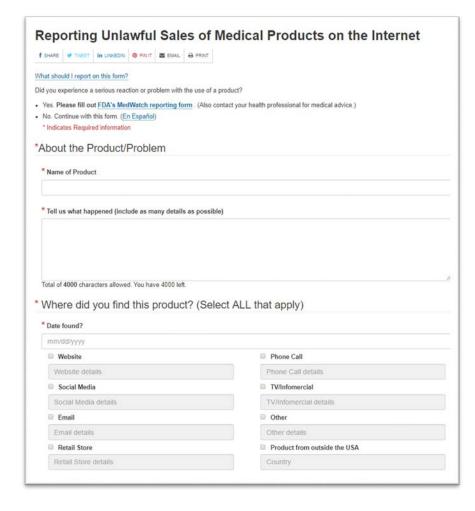
FDA\_ORA @FDA\_ORA · Jan 25

Trying to lose weight this New Year? Some bee pollen products marketed as #dietarysupplements for #weightloss can be tainted w/drugs. #FDAORA has received 50+ adverse event reports associated w/the use of these products. LEARN MORE: go.usa.gov/xnNcs #healthfraud





## Online Reporting System





#### Resources and References

## FDA

#### Resources

- Health Fraud Scams: <u>www.fda.gov/healthfraud</u>
- Health Fraud Product Database: <a href="https://www.fda.gov/consumers/health-fraud-scams/health-fraud-product-database">https://www.fda.gov/consumers/health-fraud-scams/health-fraud-product-database</a>
- Fraudulent Coronavirus (COVID-19) Products:
   <a href="https://www.fda.gov/consumers/health-fraud-scams/fraudulent-coronavirus-disease-2019-covid-19-products">https://www.fda.gov/consumers/health-fraud-scams/fraudulent-coronavirus-disease-2019-covid-19-products</a>
- Medication Health Fraud: <u>https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/MedicationHealthFraud/default.htm</u>
- Multilingual Health Fraud Protection Initiative: www.FDA.gov/SupplementSafety



#### Resources

- Reporting a Tainted Product: <u>TaintedProducts@fda.hhs.gov</u>
- Reporting Unlawful Sales of Medical Products on the Internet: <a href="https://www.fda.gov/safety/report-problem/reporting-unlawful-sales-medical-products-internet">https://www.fda.gov/safety/report-problem/reporting-unlawful-sales-medical-products-internet</a>
- Report Suspected Criminal Activity: <u>www.fda.gov/oci</u>
  - https://www.accessdata.fda.gov/scripts/email/oc/oci/contact.cfm
- MedWatch: <u>www.fda.gov/MedWatch/report.htm</u>
- Consumer Complaint Coordinators: <u>https://www.fda.gov/Safety/ReportaProblem/default.htm</u>

#### References



- 1. FDA, FTC warn companies for selling illegal, unapproved opioid cessation products using deceptive claims <a href="https://www.fda.gov/news-events/press-announcements/fda-ftc-warn-companies-selling-illegal-unapproved-opioid-cessation-products-using-deceptive-claims">https://www.fda.gov/news-events/press-announcements/fda-ftc-warn-companies-selling-illegal-unapproved-opioid-cessation-products-using-deceptive-claims</a>
- 2. FDA, FTC Warn 10 Companies Illegally Selling Dietary Supplements Claiming to Treat Diabetes: <a href="https://www.fda.gov/news-events/press-announcements/fda-ftc-warn-10-companies-illegally-selling-dietary-supplements-claiming-treat-diabetes">https://www.fda.gov/news-events/press-announcements/fda-ftc-warn-10-companies-illegally-selling-dietary-supplements-claiming-treat-diabetes</a>
- 3. FDA Warns Consumers to Avoid Certain Male Enhancement and Weight Loss Products Sold Through Amazon, eBay and Other Retailers Due to Hidden, Potentially Dangerous Drug Ingredients: <a href="https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-avoid-certain-male-enhancement-and-weight-loss-products-sold-through-amazon-ebay">https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-avoid-certain-male-enhancement-and-weight-loss-products-sold-through-amazon-ebay</a>
- 4. FDA warns consumers to avoid Rhino male enhancement products found at retailers because of undeclared and potentially dangerous drug ingredients:

  <a href="https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-avoid-rhino-male-enhancement-products-found-retailers-because-undeclared-and">https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-avoid-rhino-male-enhancement-products-found-retailers-because-undeclared-and</a>
- 5. FDA Warns Companies Illegally Selling Hangover Remedies: <a href="https://www.fda.gov/news-events/press-announcements/fda-warns-companies-illegally-selling-hangover-remedies">https://www.fda.gov/news-events/press-announcements/fda-warns-companies-illegally-selling-hangover-remedies</a>
- 6. Label Claims for Conventional Foods and Dietary Supplements: <a href="https://www.fda.gov/food/food-labeling-nutrition/label-claims-conventional-foods-and-dietary-supplements">https://www.fda.gov/food/food-labeling-nutrition/label-claims-conventional-foods-and-dietary-supplements</a>

#### References



- 7. Operation Quack Hack: <a href="https://www.fda.gov/news-events/fda-voices/fda-protects-patients-and-consumers-fraud-during-covid-19">https://www.fda.gov/news-events/fda-voices/fda-protects-patients-and-consumers-fraud-during-covid-19</a>
- 8. Unproven Infertility Supplements: <a href="https://www.fda.gov/consumers/health-fraud-scams/unproven-infertility-supplements">https://www.fda.gov/consumers/health-fraud-scams/unproven-infertility-supplements</a>
- 9. Unproven Alzheimer's Disease Products: <a href="https://www.fda.gov/consumers/health-fraud-scams/unproven-alzheimers-disease-products">https://www.fda.gov/consumers/health-fraud-scams/unproven-alzheimers-disease-products</a>
- 10. Some Imported Dietary Supplements and Nonprescription Drug Products May Harm You: <a href="https://www.fda.gov/consumers/consumer-updates/some-imported-dietary-supplements-and-nonprescription-drug-products-may-harm-you">https://www.fda.gov/consumers/consumer-updates/some-imported-dietary-supplements-and-nonprescription-drug-products-may-harm-you</a>
- 11. Statement from FDA Commissioner Scott Gottlieb, M.D., on the agency's new efforts to strengthen regulation of dietary supplements by modernizing and reforming FDA's oversight: <a href="https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-agencys-new-efforts-strengthen-regulation-dietary">https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-agencys-new-efforts-strengthen-regulation-dietary</a>
- 12. Watch Out for False Promises on Some Dietary Supplements:
- 13. <a href="https://www.fda.gov/consumers/consumer-updates/watch-out-false-promises-some-dietary-supplements">https://www.fda.gov/consumers/consumer-updates/watch-out-false-promises-some-dietary-supplements</a>

