

Dietary supplements and protein powders a 'wild west' of unregulated products

February 6 2024, by Emily Hemendinger and Katie Suleta



Credit: Pixabay/CC0 Public Domain

Dietary supplements are a big business. The industry made [almost US\\$39 billion in revenue](#) in 2022, and with [very little regulation and oversight](#), it stands to keep growing.

The marketing of dietary supplements has been quite effective, with 77% of Americans reporting feeling [that the supplement industry is trustworthy](#). The idea of taking your health into your own hands is appealing, and supplements are popular with athletes, parents and people trying to recover more quickly from a cold or flu, just to name a few.

A 2024 study found that approximately 1 in 10 adolescents have used [nonprescribed weight loss and weight control products](#), including dietary supplements.

Notably, that [systematic review](#) found that nonprescribed diet pill use was significantly higher than the use of nonprescribed laxatives and diuretics for weight management. These types of unhealthy weight control behaviors are associated with [both worsened mental health and physical health outcomes](#).

As a [licensed clinical social worker](#) specializing in treating [anxiety disorders](#) and eating disorders and a [biomedical research director](#), we've seen firsthand the harm that these supplements can do based on unfounded beliefs. The unregulated market of dietary supplements is setting consumers up to be misled and potentially seriously harmed by these products.

The wild west

The [Food and Drug Administration](#) specifies that supplements must contain a "dietary ingredient" such as vitamins, minerals, herbs, amino acids, enzymes, live microbials, concentrates and extracts, among others.

Unfortunately, manufacturers can claim that a product is a supplement even when it doesn't meet those criteria, such as products containing the drug tianeptine, a highly addictive drug that can mimic the biological action of opioids. Some of these products are labeled as dietary

supplements but are anything but.

Products containing kratom, a substance with opioidlike effects, which are sold over the counter in many gas stations, [claim to be herbal supplements but are mislabeled](#).

Under [a 1994 law](#), dietary supplements are classified as food, not as drugs. This means dietary supplements are not required to prove efficacy, unlike drugs. Regulators also don't take action on a product [until it is shown to cause harm](#).

However, [the FDA's website states that](#) "many dietary supplements contain ingredients that have strong biological effects which may conflict with a medicine you are taking or a medical condition you may have. Products containing hidden drugs are also sometimes falsely marketed as dietary supplements, putting consumers at even greater risk."

In other words, supplements are regulated as food instead of drugs, even though they can interact with medications and may be laced with hidden drugs not included on the label.

Manufacturers of [dietary supplements can make claims](#) about their products that fall into three categories: [health claims](#), nutrient content claims and claims about the product's function, structure or both, [all without needing to provide supporting evidence](#).

Misbranding and false advertising [are rampant with dietary supplements](#), including false claims of [curing cancer](#), [improving immune health](#), [improving cognitive functioning](#), [improving fertility](#), [improving cardiovascular health](#) and, of course, [promoting weight loss and weight control](#).

The FDA is cracking down

You can find supplements that claim to be good for just about every health condition, concern or goal, so it should be no surprise that there are supplements marketed for [weight loss](#).

In August 2021, the [FDA cracked down](#) on some of these weight loss products because of the presence of undeclared drugs. For example, of the 72 products recalled, [the drug sibutramine, sold as Meridia](#), was found in 68 of them.

While the FDA may take further action beyond the recalls, the agency [acknowledged that it is not able to test](#) every weight loss supplement for contamination with drugs.

These crackdowns demonstrate some progress, though several issues remain. Warning label placement, ingredients and beliefs based on misleading or false advertising [are still highly problematic](#).

Some weight loss supplements may have FDA warnings on them. Of those that do, [the disclaimers are rarely displayed](#) on the front of the product label, so consumers are less likely to see them.

Ingredients in weight loss supplements can and do have adverse effects. They have caused people to be [admitted to the emergency room](#) for cardiovascular and swallowing problems, including in young, seemingly healthy people.

Eating disorders

Mental health concerns and eating disorders are on the rise. As a result, researchers are examining unhealthy weight control behaviors, including

the use of dietary supplements and how accessible they are to adolescents and children.

People who have eating disorders often suffer related health issues such as [bone loss, osteoporosis](#) and vitamin deficiencies. In response, their doctors may prescribe dietary supplements like [calcium, vitamin D](#) and [nutritional supplement shakes](#). But these are not the dietary supplements of concern.

The concern is with supplements that promote weight loss, muscle building or both.

People with eating disorders may be attracted to dietary supplements that claim quick and pain-free weight loss or muscle gain. Additionally, dietary supplement users may struggle with an increase in [compulsive exercise](#) or [other unhealthy weight control behaviors](#).

Diet pill and supplement use has also been associated with increased risk for [developing eating disorders and disordered eating](#), as well as low self-esteem, depression and [substance use](#). While dietary supplements do not solely cause eating disorders or disordered eating, [they are one contributing factor](#) that may be addressed with preventive measures and regulations.

The allure of protein powders and fitness supplements

Protein powders and other fitness supplements also have wide appeal. Research shows that [girls are more at risk than boys](#) for using weight loss supplements. But a growing problem in boys is [the use of fitness supplements](#) such as protein powder and [creatine products](#), a compound that supplies energy to the muscles.

Use of fitness supplements [sometimes signifies a preoccupation](#) with body shape and size. For example, a 2022 study found that protein powder consumption in adolescence was associated with [future use of steroids in emerging adulthood](#).

Protein powders make claims of building lean muscles, while creatine boasts providing energy for short-term, intense exercise.

Protein itself is not [harmful at recommended doses](#). However, protein powders may contain unknown ingredients, such as [certain toxins or extra and excessive sugar](#). They can also be [dangerous when used in excess](#) and to replace other foods that possess vital nutrients.

And while creatine can usually be safely used in adults, overuse can [lead to health problems](#) and is [not recommended for minors](#). Ultimately, the impact of [long-term use of these supplements](#), especially in adolescents, is unstudied.

Possible solutions

One proposed regulation by [researchers at Harvard University](#) includes [taxing dietary supplements](#) whose labels tout weight loss benefits.

[Another policy recommendation](#) involves banning the sale of [dietary supplements](#) and other weight loss products to protect minors from these underregulated and potentially dangerous products.

In 2023, [New York successfully passed legislation](#) that banned the sale of these products to minors, [while states](#) including Colorado, California and Massachusetts have considered or are considering similar action.

Ultimately, [medical professionals](#) recommend that parents and caregivers encourage their children to [get protein and vitamins from](#)

[whole foods](#) instead of turning to supplements and powders. They also recommend encouraging teens to focus on balanced nutrition, sleep and recovery, and a variety of resistance, strength and conditioning training.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Dietary supplements and protein powders a 'wild west' of unregulated products (2024, February 6) retrieved 6 May 2024 from <https://medicalxpress.com/news/2024-02-dietary-supplements-protein-powders-wild.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.