

Dietary Supplements Regulation:

A call for proactive strategies to protect children & young adults from supplements sold for weight loss & muscle building



RESULT:

Dietary supplements lead to **23,000 emergency room visits per year in the U.S.**⁷

~30% of adolescents take dietary supplements regularly⁸ for the purposes of:

- Weight loss
- Energy
- Sexual function
- Muscle building
- Cleanse
- Vitamins

New Study Findings on Dietary Supplement Risk in FDA Adverse Event Reporting System (CAERS)⁹

- 1392 adverse events from supplement use reported Jan 2004–April 2015
 - 40% of 977 single-supplement-related reports involved severe medical events in youth age 0-25 years, including hospitalization, disability, death
- Compared to vitamins, supplements sold for weight loss, muscle building, and energy were associated with **3x the risk for severe medical events**
- Compared to vitamins, supplements sold for sexual function and colon “cleanse” were associated with **2x the risk for severe medical events**
- Severe medical events associated with vitamins were most common among young children; events associated with weight-loss, muscle-building, and energy supplements were most common among adolescents and young adults

WHAT WE CAN DO



Enhance statutory authority of federal premarket oversight over the dietary supplement industry



Implement proactive enforcement of existing regulations



Regulate sale of muscle-building, weight-loss, and energy supplements to minors



Require that manufacturers use child-proof medication caps



Consider taxation strategies to reduce adolescents' use of supplements most linked with health risks



Expand public education efforts to highlight the harms of riskier types of dietary supplements

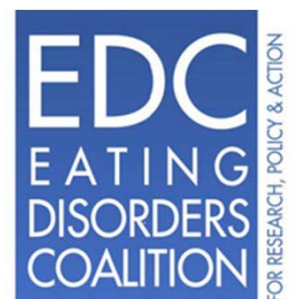
REFERENCES

1. Pomeranz JL, Barbosa G, Killian C, Austin SB. The dangerous mix of adolescents and dietary supplements for weight loss and muscle building: Legal strategies for state action. *Journal of Public Health Management and Practice*. 2015;21(5):496-503.
2. Vig, H, Deshmukh, R. (2020, June). Weight loss and weight management diet market: Global opportunity analysis and industry forecast, 2021-2027. URL: <https://www.alliedmarketresearch.com/weight-loss-management-diet-market>. Date accessed: Aug. 21, 2020.
3. Abdel-Rahman A, Anyangwe N, Carlucci L, Caspar S, Danam RP, Enongene E, Erives G, Fabricant D, Gudi R, Hilmas CJ, Hines F, Howard P, Levy D, Lin Y, Moore RJ, Pfeiler E, Thurmond TS, Turujman S, Walker NJ. The safety and regulation of natural products used as foods and food ingredients. *Toxicological Sciences*. 2011;123(2):333-348.
4. Fong TL, Klontz KC, Canas-Coto A, Caspar SJ, Durazo FA, Davern TJ 2nd, Hayashi P, Lee WM Seeff LB. Hepatotoxicity due to Hydroxycut: A case series. *American Journal of Gastroenterology*. 2009;105(7):1561-1566.
5. Grundlingh J, Dargan PI, El-Zanfaly M, Wood DM. 2,4-Dinitrophenol (DNP): A weight loss agent with significant acute toxicity and risk of death. *Journal of Medical Toxicology*. 2011;7(3):205-212.
6. Guyda HJ. Use of dietary supplements and hormones in adolescents: A cautionary tale. *Pediatric Child Health*. 2005;10(10):587-590.
7. Geller AI, Shehab N, Weidle NJ, Lovegrove MC, Wolpert BJ, Timbo BB, Mozersky RP, Budnitz, DS. Emergency department visits for adverse events related to dietary supplements. *New England Journal of Medicine*. 2015;373(16):1531-40.
8. Wilson KM, Klein, JD, Sesselberg TS, Yussman SM, Markow DB, Green AE, West JC, Gray NJ. Use of complementary medicine and dietary supplements among U.S. adolescents. *Journal of Adolescent Health*. 2006;38(4):385-394.
9. Or F, Kim Y, Simms J, Austin SB. Taking stock of dietary supplements' harmful effects on children, adolescents, and young adults. *Journal of Adolescent Health*. 2019;65(4):455-461.

STRIPED

A PUBLIC HEALTH
INCUBATOR

Strategic Training Initiative for the Prevention of Eating Disorders



Contact: Allison Ivie, Senior Director of Government Relations & Public Affairs,
Center Road Solutions, Allison.Ivie@centerroadsolutions.com