

Could Protein Shakes Harm Your Health?

Consumer Correspondent Susan Koeppen Looks at Their Potential Dangers

A new study found that overuse of some protein drinks could result in negative health effects or even be toxic. Susan Koeppen reports.



(CBS) For many people trying to get in shape or bulk up quickly, protein shakes are part of a daily workout regime.

Protein drinks are being advertised as a way to boost fitness, and that marketing targets everyone from body builders to teenagers.

But, according to a new study, over-consuming some of those products could be dangerous.

“**Early Show**” Consumer Correspondent **Susan Koeppen** takes a look at an investigation being released Monday by [Consumer Reports](#).

Though manufacturers and salesmen say that these products are safe, the new study says some protein drinks may cause health problems over time. The investigation found some contain things like arsenic, cadmium, and lead.

CBS News took a hidden camera to nutrition stores in New York City asking about these supplemental drinks, but not one sales person warned about possible health risks.

Some said taking more than recommended doses wouldn't hurt.

But trainer/dietician Erin Palinski says, not so. "They're actually going to harm their health if they do excessive amounts," said Palinski.

Experts say too much protein can lead to dehydration and digestive problems, increase your risk for osteoporosis, and for some people, cause kidney problems.

And now, an investigation appearing in the July issue of Consumer Reports finds that some protein drinks could be toxic, if you take too much.

Says CR's Urvashi Rangan, "We tested about 15 different types of protein drinks. ... And we actually looked for four

different heavy metals. We looked for arsenic, cadmium, mercury, and lead."

Test results found heavy metals present in all 15 drinks -- some more than others.

Consumer Reports says three products were of particular concern -- because consuming three servings a day could result in exposure to arsenic, cadmium or lead that exceed proposed limits for contaminants:

- Eas Myoplex (Arsenic, Cadmium)
- Muscle Milk-Chocolate (Cadmium, Lead)
- Muscle Milk-Vanilla Crème (Lead)

Urvashi Rangan, Consumer Reports, said, "What we're concerned about here is the chronic low level exposure of a heavy metal. And what people should know, is that heavy metals, once they come into our bodies, once they're metabolized, they tend to stay there for a long period of time."

The supplement industry disputes claims that protein shakes could be harmful.

Andrew Shao, of the [Council for Responsible Nutrition](#), says, "The results of this analysis aren't alarming. The heavy metals that were found are well below the limits FDA (Food and Drug Administration) would be concerned about, so they don't pose a health risk to consumers at all."

But Consumer Reports says there is little regulation requiring manufacturers to prove their protein drinks are safe.

"We think the FDA should be tracking these products better," says Rangan, "and that is not happening at this time."

The manufacturers of those three products say independent testing shows their products are within government safety standards even if taken three times a day.

Still, CR notes there other ways to get protein at a cheaper price, such as:

- Half a chicken breast (27 grams of protein, 62 cents per serving)
- Three glasses of milk (23 grams of protein, 60 cents per serving)
- Three scrambled eggs (20 grams of protein, 46 cents per serving)

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Here are the average amounts of metals we found in three servings of these protein drinks. The maximum limits for them in dietary supplements proposed by the U.S. Pharmacopeia are: arsenic (inorganic), 15 micrograms (µg) per day; cadmium, 5 µg; lead, 10 µg; mercury, 15 µg. Amounts at or exceeding those limits are in bold. Experts said three servings a day is common.

Product (powder unless otherwise indicated)	Amount in 3 servings	Protein (g/ 3 servings)	Test results			
			Arsenic (µg/3 servings)	Cadmium (µg/3 servings)	Lead (µg/3 servings)	Mercury (µg/3 servings)
BSN Core Series Lean Dessert Protein Shake Chocolate Fudge Pudding	105 g	63	3.3	3.7	2.5	0.3*
BSN Core Series Syntha-6 Ultra Chocolate MilkShake	132 g	66	4.2	2.6	5.4	1.1
Designer Whey 100% Whey Protein Chocolate	78 g	54	3.9	1.6	2.4	0.9
EAS Myoplex Original Rich Dark Chocolate Shake (liquid)	1,500 mL	126	16.9	5.1*	-	-
GNC Lean Shake Chocolate	144 g	27	7.0	3.9	4.9	-
GNC Pro Performance AMP Amplified WheyBolic Extreme 60 Chocolate	237 g	180	5.4	2.5	2.5	-
Jillian Michaels Natural Whey Protein Vanilla Cream Shake	81 g	45	1.9	-	1.2	-
Muscle Milk Chocolate	210 g	96	12.2	5.6	13.5	0.7*
Muscle Milk Nutritional Shake Chocolate (liquid)	990 mL	66	14.3	-	6.8	-
Muscle Milk Vanilla Crème	210 g	96	11.2	2.0	12.2	-
MuscleTech Nitro-Tech Hardcore Pro-Series Vanilla MilkShake	96 g	75	1.2	-	0.4*	0.9
Optimum Nutrition Gold Standard 100% Whey Extreme Milk Chocolate	96 g	72	2.5	1.7	1.0	0.2*
Optimum Nutrition Platinum Hydro Whey Velocity Vanilla	117 g	90	1.5	-	-	-
Six Star Muscle Professional Strength Whey Protein French Vanilla Cream	117 g	78	2.3	-	-	-
Solgar Whey to Go Whey Protein Powder Natural Vanilla Bean	60 g	48	0.6*	-	-	-

(-) Element was not measurable in all samples tested.

*In some samples of this product, this metal was below measurable levels and could be as low as zero. For those products, the average was calculated using zero as the value for samples in which metal could not be measured by the analytical method used.

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