

Update

August 23, 2013

#### Aloe vera products made to IASC standards are safe: IASC responds to CSPI's press release

The International Aloe Science Council (IASC) responded to the Center for Science in the Public Interest (CSPI) recent news release<sup>1</sup> telling consumers to avoid taking aloe vera orally, with what IASC executive director, Devon Powell, called "some simple facts:"

## Recently published studies on consumer products showed no carcinogenic effects

Several manufacturers of aloe vera products for oral consumption published studies on their products to demonstrate their safety. Each of these studies concluded that there were no carcinogenic effects in mice or rats.<sup>2,3,4</sup> "These studies provide significant data demonstrating that aloe vera products manufactured according to IASC standards for aloin content are safe," said Powell.

## Purified (decolorized) aloe vera: no known carcinogenic concerns according to internationally recognized cancer organization

The International Agency for Research on Cancer (IARC) recently published aloe vera carcinogenicity information<sup>5</sup>, and determined that unpurified whole leaf aloe vera juice is possibly carcinogenic to humans due to its aloin content. The IARC report also noted that purification by decolorization removes the toxic latex constituents of concern. "The powerful laxative effect from ingesting unpurified aloe vera products would make it obvious if that's what people were consuming," said Powell. "IARC clearly understands that decolorized whole leaf aloe vera juice is devoid of the toxic chemicals that have caused so much concern, yet CSPI seems willing to make uninformed and sensational comments that will only serve to

confuse and frighten consumers despite the facts."

# The vast majority of aloe vera products for oral consumption are decolorized, or purified

Decolorization, or purification, is the process of removing laxative constituents from aloe vera raw materials during processing. The IASC has produced a video on the process of decolorization, which can be viewed <u>here</u>. This process uses an activated charcoal filtration step to ensure that aloe vera juice finished products are virtually free of toxic constituents found in aloe vera latex.

# The NTP test article is chemically distinct from what is found in consumer products for oral consumption

The IASC tested the aloe vera study material used by the National Toxicology Program (NTP) in their animal studies and, as expected, found the major aloe vera latex laxative component, aloin, present in substantial quantities of a few percent of the total. This is not the ingredient that consumers ingest from the vast majority of commercially available aloe vera products. Additional details on the NTP study can be found by reading the <u>IASC's position paper</u> or by contacting the IASC.

#### IASC Certified Products are tested and controlled for aloin content

The IASC created and manages a third-party certification program that ensures the content and purity of aloe vera products. Products in the program are analytically tested for aloin content to ensure compliance with a maximum limit of 10 parts per million. Consumers can look for the IASC seal to purchase IASC certified products.

Speaking on the IASC's third-party certification program for aloe vera products, Mr. Powell said, "The vast majority of certified aloe vera products contain less than 1 ppm aloin. The IASC does not certify unpurified aloe vera products and discourages their use. Although unpurified products are not as widely available we encourage customer awareness and avoidance of them."

The IASC maintains a list of program products (http://www.iasc.org/complete.html).

- Sehgal I, Winters WD, Scott M, Kousoulas K. An in vitro and in vivo toxicologic evaluation of a stabilized aloe vera gel supplement drink in mice. Food Chem Toxicol. 2013 May;55:363-370.
- Sehgal I, Winters WD, Scott M, David A, Gillis G, Stoufflet T, Nair A, Kousoulas K. Toxicologic assessment of a commercial decolorized whole leaf aloe vera juice, Lily of the Desert filtered whole leaf juice with aloesorb. *J Toxicol.* 2013. doi: 10.1155/2013/802453. Epub 2013 Mar 11.
- 4. Shao A, Broadmeadow A, Goddard G, Bejar E, Frankos V. Safety of purified decolorized (low anthraquinone) whole leaf

<sup>1.</sup> http://www.cspinet.org/new/201308211.html accessed August 21, 2013.

*Aloe vera* (L.) Burm. f. juice in a 3-month drinking water toxicity study in F344 rats. *Food Chem Toxicol.* 2013 Mar 14;57C:21-31.

5. IARC Monograph Working Group; *Carcinogenicity of some drugs and herbal products*, June 2013, <u>http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(13)70329-2/</u>

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