

By: Representative Haak
By: Senator Bledsoe

HOUSE CONCURRENT RESOLUTION

TO ENCOURAGE THE UNITED STATES CONGRESS TO ESTABLISH A MAXIMUM LIMIT OF OPIATE ALKALOID CONTAMINATION OF POPPY SEEDS AND ENSURE THE SAFETY OF IMPORTED POPPY SEEDS AND TO ISSUE IMPORT REQUIREMENTS AND CONDUCT TESTING TO ENSURE THAT IMPORTED SEEDS DO NOT EXCEED THE MAXIMUM THRESHOLD OF OPIATE CONTAMINATION.

Subtitle

TO ENCOURAGE THE UNITED STATES CONGRESS TO ESTABLISH A MAXIMUM LIMIT OF OPIATE ALKALOID CONTAMINATION OF POPPY SEEDS AND ENSURE THE SAFETY OF IMPORTED POPPY SEEDS AND TO ISSUE IMPORT REQUIREMENTS AND CONDUCT TESTING.

WHEREAS, in 2016, Stephen Hacala Jr. passed at twenty-four (24) years of age from morphine intoxication after drinking poppy seed tea without being aware that the poppy seed coats were contaminated with a lethal amount of morphine, also known as "opium latex"; and

WHEREAS, Stephen Hacala Jr.'s parents, Steve and Betty Hacala, who are residents of Rogers, Arkansas, desire to raise awareness of the dangers of unprocessed poppy seeds and to advocate for changes in policy, control, and enforcement to stop the unlawful and dangerous importation and distribution of morphine-contaminated poppy seeds; and

WHEREAS, consumption of opiate alkaloid-contaminated poppy seeds poses



a substantial public health threat that has been overlooked as a component of the larger opioid epidemic; and

WHEREAS, poppy seeds originate from the opium poppy, *Papaver somniferum*, a plant that can produce substantial amounts of naturally occurring opioids called "opiate alkaloids", including morphine, codeine, and thebaine; and

WHEREAS, producers who grow *Papaver somniferum* primarily for seed production may use "low morphine" cultivars, although there is no generally defined delineation between the opiate alkaloid content of these cultivars and others; and

WHEREAS, opiate alkaloids work to inhibit neuronal pain pathways and have substantial analgesic effects, but also can produce euphoria and other potentially unwanted effects, including nausea, sedation, respiratory depression, slow heart rate, and constipation; and

WHEREAS, the risk of overdose death from opioids can be compounded with the concurrent usage of other substances, especially benzodiazepines, which also cause respiratory depression; and

WHEREAS, the United States Drug Enforcement Administration lists specific opioids, including morphine, codeine, and thebaine, as well as "poppy straw" and "poppy straw concentrate", as Schedule II controlled substances with a "high potential for abuse which may lead to severe psychological or physical dependence"; and

WHEREAS, the United States banned domestic cultivation of *Papaver somniferum* in the Opium Poppy Control Act of 1942, and trade agreements further limit cultivation of the poppy plant to certain countries; and

WHEREAS, appropriate preventive controls such as washing the seeds during processing can reduce the presence of opiate alkaloids in poppy seeds to safe levels; and

WHEREAS, while concentrations of individual opiate alkaloids in contaminated seeds can vary by batch, morphine is generally found in the highest concentrations; and

WHEREAS, between 2012 and 2017, the European Food Safety Authority collected and tested one thousand one hundred sixty-four (1,164) poppy seed samples from ten (10) countries and detected morphine contamination levels of a mean of fifty-seven and eight-tenths milligrams per kilogram (57.8 mg/kg), a median of thirteen and six-tenths milligrams per kilogram (13.6 mg/kg), a ninety-fifth percentile of two hundred fifty-three milligrams per kilogram (253 mg/kg), and a maximum of five hundred ninety-six milligrams per kilogram (596 mg/kg); and

WHEREAS, another study from 2020 found that purchased seeds in the United Kingdom that originated from at least four (4) different countries had morphine concentrations ranging from undetectable to sixty-four milligrams per kilogram (64 mg/kg); and

WHEREAS, high concentrations of opiate alkaloids in contaminated poppy seeds lead to the potential for ingestion of therapeutic or toxic doses; and

WHEREAS, the lethal dose of morphine can range widely, due to differences in individual tolerance; and

WHEREAS, consumer practices such as brewing the contaminated poppy seeds into a tea or other liquid may concentrate the opiate alkaloid content, which increases the risks of reaching or exceeding effective doses of opioids from the consumption of poppy seeds; and

WHEREAS, ingestion of these teas is typically used for the purposes of intoxication or claimed health benefits, including the treatment of pain, anxiety, and opioid withdrawal; and

WHEREAS, extracting opiate alkaloids from contaminated poppy seeds or poppy into a liquid for consumption is well documented historically, and sometimes with resulting adverse events and deaths; and

WHEREAS, standard recipes for tea or other drinks can rely on substantial quantities of seeds for opiate alkaloid extraction; and

WHEREAS, a 2018 study by Deborah Powers et al. brewed tea with samples of poppy seeds purchased online from twenty-two (22) different samples and analyzed the opiate alkaloid content of teas brewed with the seeds finding that morphine concentrations in some samples were high enough to yield two thousand seven hundred eighty-eight milligrams per kilogram (2,788 mg/kg) of morphine in a tea form, in addition to variable amounts of codeine and thebaine; and

WHEREAS, in addition to the risks of clinical effects, the consumption of contaminated poppy seeds also poses a risk of exceeding drug testing thresholds, even in the amounts found on some common popular baked goods; and

WHEREAS, a study by Kimberly L. Samano et al. in 2015 found morphine concentrations as high as one thousand four hundred eight nanograms per milliliter (1,408 ng/ml) in urine samples two (2) hours after study participants ingested a Ukrainian-style poppy seed roll prepared from approximately fifteen grams (15 g) of seeds purchased from a Kansas spice market; and

WHEREAS, the risk of contaminating poppy seeds with high levels of opiate alkaloids before they reach the consumer can be largely mitigated through appropriate preventive controls by producers; and

WHEREAS, the United States Drug Enforcement Administration issued a notice in November 2019 confirming that poppy seeds contaminated with opium alkaloids are considered Schedule II controlled substances pursuant to 21 U.S.C. § 812 of the Controlled Substances Act; and

WHEREAS, however, a United States agency has not issued regulations, guidance, or recommendations identifying a maximum permissible threshold of opiate alkaloid contamination of poppy seeds or describing the manufacturing practices recommended to reduce the presence of opiate alkaloids in poppy

seeds; and

WHEREAS, as a result of this inaction, contaminated poppy seeds are readily available at local retailers and online; and

WHEREAS, some manufacturers and retailers intentionally market heavily contaminated poppy seeds, using specific language such as “raw” or “unwashed” to signal that their products contain higher concentrations of opiates than properly processed seeds; and

WHEREAS, policies from vendors, such as an Amazon.com, Inc. policy to limit the sale of poppy seeds to one-pound bags or less and to require poppy seeds to be from approved brands, may help discourage the sale of contaminated poppy seeds; and

WHEREAS, the United States Congress, the United States Food and Drug Administration, and the United States Drug Enforcement Administration should take action to preserve the health and safety of all citizens of this nation,

NOW THEREFORE,

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE NINETY-THIRD GENERAL ASSEMBLY OF THE STATE OF ARKANSAS, THE SENATE CONCURRING THEREIN:

THAT the House of Representatives of the Ninety-Third General Assembly of the State of Arkansas, the Senate concurring, encourages the United States Congress, the United States Food and Drug Administration, and the United States Drug Enforcement Administration to:

(1) Issue regulations and guidance establishing a maximum permissible threshold of opiate alkaloid contamination of poppy seeds sold in the United States and describing current good manufacturing practices to reduce the presence of opiate alkaloids in poppy seeds; and

(2) Issue import requirements and conduct testing of imports to ensure the safety of imported seeds, including an import alert specifying steps to ensure that imported seeds do not exceed the maximum threshold of opiate alkaloid contamination.

BE IT FURTHER RESOLVED THAT upon adoption of this resolution, an appropriate copy be provided by the Chief Clerk of the House of Representatives to the United States Food and Drug Administration, the United States Drug Enforcement Administration, the majority leader of the United States Senate, the Speaker of the United States House of Representatives, and the members of the Arkansas congressional delegation.