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The Use of Topical Honey in the Treatment of Corneal Abrasions and Endotoxin-Induced Keratitis in an Animal Modell. September 2011, Vol. 36, No. 9, Pages 787-796
Department of Ophthalmology, Jones Eye Institute, Little Rock, Arkansas, USA
Correspondence: Sami Uwaydat, M.D., Department of Ophthalmology, Jones Eye Institute, 4301 West Markham, Mail slot 523, Little Rock, AR 72205. E-mail: uwaydatsamih@uams.edu

Purpose: To investigate the effect of topically applied honey on intact corneas, surgically induced corneal abrasions and endotoxin induced keratitis.

Materials and Methods: The effect of honey on the cornea was investigated by application of honey on intact corneas, wounded corneas and endotoxin-induced keratitis in Lewis rats. The corneas were wounded by creating an epithelial defect using a surgical blade, and the keratitis was induced by topically applying Pseudomonas aeruginosa endotoxin to scarified corneas. After treatment rats were sacrificed and cornea harvested in each case. Corneas were processed for paraffin embedding for histological and immuno-fluorescence staining. Corneas were also harvested and processed for total ribonucleic acid (RNA) isolation for reverse transcriptase-polymerase chain reaction (RT-PCR) analysis for various growth factors and inflammatory chemokines/cytokines.

Results: Histological analysis revealed that no inflammation or morphological changes occurred after honey treatment in naive intact corneas. Vascular endothelial growth factor (VEGF) levels were also not altered after honey treatment. Topical application of honey to injured corneas resulted in faster epithelial healing and decreased expression of VEGF, transforming growth factor beta (TGF-β), interferon gamma (IFN-γ), interleukin 12 (IL-12) and tumor necrosis factor alpha (TNF-α) in injured corneas. Our results also established that honey treatment reduced the inflammation in endotoxin-induced keratitis by reducing the levels of angiogenic factors (VEGF and TGF-β), inflammatory cytokines (IL-12) and chemokines (CC chemokine receptor 5(CCR-5)).

Conclusion: Short term use of honey on intact corneas can be safe. Honey has anti-angiogenic and anti-inflammatory properties that can be explored in several corneal inflammatory and infectious conditions. Read More: http://informahealthcare.com/doi/abs/10.3109/02713683.2010.544441
(Sherburne, NY – Aug. 2011) Another week, another scathing report about corporate and governmental malfeasance and fraud, all in the name of profit, of course, and always to the detriment of the unsuspecting consumer in the marketplace.

Andrew Schneider, a Pulitzer Prize-winning investigative reporter who writes for Food Safety News (FSN) and The Food Watchdog.com, reports that at least a third of all honey consumed in the U.S. has been smuggled in from China and may be tainted with illegal antibiotics and heavy metals.

Additionally, some of the largest and oldest U.S. honey packers are knowingly buying mislabeled, transshipped, or altered honey so they can sell it cheaper than companies that insist on quality and rigorous safety inspections.

The FSN report states that the FDA is responsible for protecting consumers from dangerous honey, identifying it as adulterated and therefore illegal for importation. Other enforcement agencies (such as U.S. Departments of Customs and Border Patrol and Immigration and Customs Enforcement) say the FDA doesn’t see this as a priority.

Even though honey from China has been banned in this country because of contaminants, apparently the Chinese are selling their honey to countries such as India and Vietnam, which then illegally relabel it as to country of origin and export it to the U.S. And the U.S. companies that buy that honey here don’t seem to care.

Schneider reports that food safety investigators from the European Union barred all shipments of honey from India because of the presence of lead and illegal animal antibiotics, including several Indian-made animal antibiotics, such as chloramphenicol. Medical researchers found that children given chloramphenicol as an antibiotic are susceptible to DNA damage and carcinogenicity, and the FDA has banned its presence in food. Chloramphenicol can cause a severe, sometimes fatal reaction – aplastic anemia – in about one out of 30,000 people.

Although the Chinese have many state-of-the-art processing plants, there are tens of thousands of tiny beekeeping operations spread throughout the country that use small, unlined, lead-soldered drums to collect and store the honey before it is collected by the brokers for processing. The lead from the containers leaches into the honey and contaminates it.

The FSN investigation states that the U.S. consumes about 400 million pounds of honey a year – 1.3 pounds a person. About 35 percent is consumed in homes, restaurants and institutions. The remaining 65 percent is bought by industry for use in hundreds of different processed foods. U.S. beekeepers can supply only about 48 percent of what’s needed in the U.S., with the rest coming from 41 other countries.

The U.S. imported 208 million pounds of honey over the past 18 months. About 48 million pounds came from “trusted and usually reliable” suppliers in Argentina, Brazil, Canada, Uruguay and Mexico. Almost 60 percent of what was imported came from Asian countries that are known laundering points for Chinese honey.

The illegal practice of transshipment of Chinese honey to a second country before being reshipped to the U.S. was targeted by the Justice Department, the Department of Homeland Security and the FDA and resulted in arrests of 23 German, Chinese, Taiwanese and American corporate officials and their nine international companies. They were charged with conspiracy to smuggle more than $70 million worth of Chinese honey into the U.S. by falsely declaring that the honey originated from countries other than China, which allowed them to avoid paying expensive anti-dumping charges imposed on China. Despite the arrests, the practice continues.

Sen. Kirsten Gillibrand (D-NY) has urged FDA Commissioner Margaret Hamburg to issue an official definition of honey (none exists now) and has called the lack of regulations (on imported honey) a food safety concern. (Her Syracuse office phone is 315-448-0470 if you’d like to encourage her in this effort).

The full report on this global scam, which details the tremendous efforts expended to deceive inspectors and Customs officials and circumvent import/export laws and regulations around the globe, can be found at foodsafetynews.com.

The U.S. corporations that are buying and retailing this tainted honey do not care that the consumer – that would be you – is being deceived or potentially poisoned. So don’t buy their honey products. Instead, buy local honey at farmers markets or farm stores or directly from the producers. They are:

- Kutik’s Honey Farm, 285 Lyon Brook Road, Norwich; Johnstons Honey Bee Farm, 3653 State Route 26, Eaton; LT’s Loco Honey, 7430 State Highway 12, Sherburne; Knapp Bros. Apiary, 7694 Route 20, Madison or McCoy’s Pure Raw Honey, 307 NYS Route 28, Oneonta.

Chris Hoffman lives in the village of Sherburne in her 150+ year-old house where she caters to the demands of her four cats, attempts to grow heirloom tomatoes and herbs and reads voraciously. She passionately pursues various avenues with like-minded friends to preserve and protect a sustainable rural lifestyle for everyone in Central New York.
Local beekeepers, honey sellers and produce farmers are worried about the mysterious malady known as colony collapse disorder, which kills off hives, but most of them aren’t feeling any direct negative impacts — yet.

“Not to this point, but we are concerned,” said Frank Schmidt, of Schmidt Aviaries, who sells 40,000 pounds of honey at small stores and farmers markets in the area and keeps 600 hives north and south of Colorado Springs, mostly near fields of alfalfa — when he can find them. “The farming is getting pretty limited around here,” he said.

Urbanization is only one of many challenges bees and their keepers are facing. Schmidt had a booth set up at a recent screening of the documentary film “The Vanishing of the Bees,” part of Cross Pollination 2011, a community-wide three-month-long celebration of the role pollinators play in American life with a special emphasis on how to protect them. It kicked off just after Aug. 20, which is National Honeybee Awareness Day.

The U.S. Department of Agriculture estimates that bee pollination contributes $15 billion annually to the nation’s crop value. Honeybees in particular are responsible for 80 percent of the nation’s crop pollination. But in the 1980s they began to decline in numbers, as non-native pests such as mites infiltrated hives, and then in 2007, with the arrival of colony collapse disorder, a term coined for mass disappearances of bees from hives throughout North America, the buzz got even louder.

“The Vanishing of the Bees” tells the story of two Florida beekeepers who blew the whistle on the rare phenomenon after they noticed that the bees seemed to grow weak and listless before abandoning their hives entirely. It explains that while bees were already routinely trucked across the country to pollinate crops, when the number of U.S. bees became too low to adequately pollinate the almond orchards in California, bees started being shipped across oceans, too.

Along with the bees, honey itself is increasingly transcontinental. Large amounts of cheap honey are being imported and blended into domestic versions, which brings prices to consumers down but makes honey production less profitable. According to a recent report in Food Safety News, at least a third of all the honey consumed in the U.S. now comes from China, much of it illegally. Still, honey prices have been trending higher in recent years, with the average retail price above $5 a pound so far in 2011.

Though researchers haven’t reached a conclusion on what is continuing to afflict the bees, the documentary shown in Colorado Springs makes the case that “systemic pesticides” (the kind with long residuals that are absorbed deep into plant tissues) are largely to blame, a claim that has lead to clashes between beekeepers, conventional farmers and big agribusiness companies worldwide. Political demonstrations in some parts of Europe have succeeded in sparking bans of certain products.

Modern beekeeping practices also include feeding bees sugar syrups and using artificial insemination for breeding purposes, which organic beekeepers question in the film. One reason damage from the honeybee die-off has been limited so far is that farmers and gardeners benefit from a wide range of native pollinators including wild bees, wasps and moths. Honeybees are actually native to Europe and were introduced to the U.S. .......

“...Still, many organic farmers, gardeners and consumers see it as evidence that farm inputs and agronomic practices haven’t been studied enough, even while conventional farmers fret about how time-consuming and costly it is to bring new technology to the market.

“It’s a big industry, and it’s a dramatic development that the bees are disappearing like they are,” Venetucci’s Rubin said. “It’s the canary in the coal mine. It’s a cause for paying attention and making sure we figure this thing out.” (this story edited for brevity)
Asian Honey, Banned in Europe, Is Flooding U.S. Grocery Shelves

FDA has the laws needed to keep adulterated honey off store shelves but does little, honey industry says.

BY ANDREW SCHNEIDER | AUG 15, 2011

A third or more of all the honey consumed in the U.S. is likely to have been smuggled in from China and may be tainted with illegal antibiotics and heavy metals. A Food Safety News investigation has documented that millions of pounds of honey banned as unsafe in dozens of countries are being imported and sold here in record quantities.

And the flow of Chinese honey continues despite assurances from the Food and Drug Administration and other federal officials that the hundreds of millions of pounds reaching store shelves were authentic and safe following the widespread arrests and convictions of major smugglers over the last two years.

Experts interviewed by Food Safety News say some of the largest and most long-established U.S. honey packers are knowingly buying mislabeled, transshipped or possibly altered honey so they can sell it cheaper than those companies who demand safety, quality and rigorously inspected honey.

“It’s no secret that the honey smuggling is being driven by money, the desire to save a couple of pennies a pound,” said Richard Adee, who is the Washington Legislative Chairman of the American Honey Producers Association.

“These big packers are still using imported honey of uncertain safety that they know is illegal because they know their chances of getting caught are slim,” Adee said.

Food safety investigators from the European Union barred all shipments of honey from India because of the presence of lead and illegal animal antibiotics. Further, they found an even larger amount of honey apparently had been concocted without the help of bees, made from artificial sweeteners and then extensively filtered to remove any proof of contaminants or adulteration or indications of precisely where the honey actually originated.

An examination of international and government shipping tallies, customs documents and interviews with some of North America’s top honey importers and brokers documented the rampant honey laundering and that a record amount of the Chinese honey was being purchased by major U.S. packers.

Food Safety News contacted Suebee Co-Op, the nation’s oldest and largest honey packer and seller, for a response to these allegations and to learn where it gets its honey. The co-op did not respond to repeated calls and emails for comment. Calls and emails to other major honey sellers also were unreturned.

EU Won’t Accept Honey from India

Much of this questionable honey was officially banned beginning June 2010 by the 27 countries of the European Union and others. But on this side of the ocean, the FDA checks few of the thousands of shipments arriving through 22 American ports each year.

According to FDA data, between January and June, just 24 honey shipments were stopped from entering the country. The agency declined to say how many loads are inspected and by whom.

However, during that same period, the U.S. Department of Agriculture reported that almost 43 million pounds of honey entered the U.S. Of that, the Department of Commerce said 37.7 million pounds came from India, the same honey that is banned in the EU because it contained animal medicine and lead and lacked the proper paperwork to prove it didn’t come from China.

“There are still millions of pounds of transshipped Chinese honey coming in the U.S. and it’s all coming now from India and Vietnam and everybody in the industry knows that,” said Elise Gagnon, president of Odem International, a worldwide trading house that specializes in bulk raw honey.

The FDA says it has regulations prohibiting foods banned in other countries from entering the U.S. However, the agency said last month that it “would not know about honey that has been banned from other countries…”

Adee called the FDA’s response “absurd.” He said the European ban against Indian honey is far from a secret.

“Why are we the dumping ground of the world for something that’s banned in all these other countries?” asked Adee, who, with 80,000 bee colonies in five states, is the country’s largest honey producer.

“We’re supposed to have the world’s safest food supply but we’re letting in boatloads of this adulterated honey that all these other countries know is contaminated and FDA does nothing.”

The food safety agency said it’s doing the best it can with existing resources and will do more when the newly passed Food Safety Modernization Act is up and running.

Where Is Our Honey Coming From?

The U.S. consumes about 400 million pounds of honey a year - about 1.3 pounds a person. About 35 percent is consumed in homes, restaurants and institutions. The remaining 65 percent is bought by industry for use in cereals, baked goods, sauces, beverages and hundreds of different processed foods.

However, the USDA says U.S. beekeepers can only supply about a 48 percent of what’s needed
here. The remaining 52 percent comes from 41 other countries.

Import Genius, a private shipping intelligence service, searched its databases of all U.S. Customs import data for Food Safety News and provided a telling breakdown:
- The U.S. imported 208 million pounds of honey over the past 18 months.
- About 48 million pounds came from trusted and usually reliable suppliers in Argentina, Brazil, Canada, Uruguay and Mexico.
- Almost 60 percent of what was imported - 123 million pounds - came from Asian countries - traditional laundering points for Chinese honey. This included 45 million pounds from India alone.

“This should be a red flag to FDA and the federal investigators. India doesn’t have anywhere near the capacity - enough bees - to produce 45 million pounds of honey. It has to come from China,” said Adee, who also is a past president of the American Honey Producers Association.

Why Is Chinese Honey Considered Dangerous?

Chinese honeymakers began using various illegal methods to conceal the origin of their honey beginning in about 2001. That’s when the U.S. Commerce Department imposed a stiff tariff - as much as $1.20 a pound -- on Chinese honey to dissuade that country from dumping its dirt-cheap product on the American market and forcing hundreds of U.S. beekeepers out of the business.

About the same time, Chinese beekeepers saw a bacterial epidemic of foulbrood disease race through their hives at wildfire speed, killing tens of millions of bees. They fought the disease with several Indian-made animal antibiotics, including chloramphenicol. Medical researchers found that children given chloramphenicol as an antibiotic are susceptible to DNA damage and carcinogenicity. Soon after, the FDA banned its presence in food.

“We need imported honey in this country. But, what we don’t need is circumvented honey, honey that is mislabeled as to country of origin, honey that is contaminated with antibiotics or heavy metal,” said Ronald Phipps, co-chairman of the International Committee for Promotion of Honey and Health and head of the major honey brokerage firm CPNA International.

Heavy Metal Contamination

The Chinese have many state-of-the-art processing plants but their beekeepers don’t have the sophistication to match. There are tens of thousands of tiny operators spread from the Yangtze River and coastal Guangdong and Changhai to deep inland Qinghai province. The lead contamination in some honey has been attributed to these mom-and-pop vendors who use small, unlined, lead-soldered drums to collect and store the honey before it is collected by the brokers for processing.

The amount of chloramphenicol found in honey is miniscule. Nevertheless, public health experts say it can cause a severe, even fatal reaction -- aplastic anemia -- in about one out of 30,000 people.

European health authorities found lead in honey bought from India in early 2010. A year later, the Indian Export Inspection Council tested 362 samples of honey being exported and reported finding lead and at least two antibiotics in almost 23 percent of the test samples.

The discovery of lead in the honey presents a more serious health threat. “The presence of heavy metals is a totally different story, because heavy metals are accumulative, they are absorbed by organs and are retained. This is especially hazardous for children,” Phipps said.

Why Hasn’t Smuggling Stopped?

The massive honey laundering scams that plagued the U.S. for more than a decade - the transshipment of Chinese honey to a second country before being reshipped to the U.S. -- were presumably given a deathblow over the past two years.

During that period, Justice Department lawyers and Department of Homeland Security and FDA investigators launched a series of indictments and arrests of 23 German, Chinese, Taiwanese and American corporate officials and their nine international companies.

They were charged with conspiracy to smuggle more than $70 million worth of Chinese honey into the U.S. by falsely declaring that the honey originated from countries other than China. That allowed them to avoid paying stiff anti-dumping charges imposed on China.

Adee and others interviewed by Food Safety News say there are 12 major honey packers in the U.S. and four or five that are involved with the bulk of illegal trade.

“We know who they are,” he said. “Everyone in the industry knows. If these packers are allowed to continue buying this possibly tainted but clearly illegal smuggled honey, the importers will always find a way to get it to them.”

Editor’s Note: Andrew Schneider, a two-time Pulitzer Prize-winning investigative reporter, writes for Food Safety News and The Food Watchdog.com

HONEY CROPS AND MARKETS Wednesday, 20 July 2011 12:20 Written by Horacio Mezziga

Corresponds to the month of July, 2011

United States of America: The USDA and Apiary Inspectors of America colony loss survey indicates a 30% colony loss during the winter of 2010/2011. According to their news release, this is roughly similar to total losses reported in similar surveys done in the four previous years: 34 percent for the 2009/2010 winter, 29 percent for 2008/2009, 36 percent for 2007/2008, and 32 percent for 2006/2007. “The lack of increase in losses is marginally encouraging in the sense that the problem does not appear to be getting worse for honey bees and beekeepers,” said Jeff Pettis, head of the USDA’s Beltsville, Maryland Bee Disease Laboratory. “But continued losses of this size put tremendous pressure on the economic sustainability of commercial beekeeping,” Pettis says.
ANNOUNCED A PARTNERSHIP TO PROMOTE HONEY EDUCATION

Sunday, 31 July 2011 17:45 Written by Analia Manriquez

The National Honey Board (NHB) is pleased to announce a new partnership with the National Association of Pediatric Nurse Practitioners (NAPNAP). Together, the organizations will develop a honey education program, based on recent research findings that uncovered widespread confusion surrounding the age when honey can be introduced to young children. Focused on health professionals who deal directly with parents of young children, education efforts will dispel honey misconceptions, explain the benefits of honey and remind parents that honey can be given to children older than one year of age.

“It’s widely known that honey shouldn’t be fed to infants, but most people don’t know why or at what age it can be introduced,” said Cheri Barber, DNP, RN, CRNP, President of NAPNAP. “The truth is that honey can be introduced to a child at one year of age. It’s important that health care professionals and families with young children understand the facts about honey.” Barber added that honey has been used for centuries to help soothe coughs, and with the recommended removal of over-the-counter cough medicines containing dextromethorphan (DM), parents are turning to effective natural remedies like honey.

The National Honey Board confirmed earlier this year through focus groups and a nationally fielded online survey that there is a need for honey education. Research* revealed that moms are confused about when to feed honey to their children, citing reasons for avoidance like allergens, bacteria and the like. But the educational program of NHB and NAPNAP would set the record straight:

Because infants’ gastrointestinal systems are immature and thus susceptible to contracting infant botulism if spores are present, the Centers for Disease Control, the American Academy of Pediatrics, the California Department of Public Health and other health associations recommend that certain foods not be fed to infants under one year of age, including honey. After 12 months of age, honey may be introduced to a child’s diet. Botulinum spores occur in nature, but honey is one of the potential dietary sources for infant botulism.

The research showed that moms are nearly as likely to think honey is a potential food allergen as they are to identify its association with bacterial illness (36% avoid feeding infants honey because they think it’s an allergen, 39% avoid honey due to its association with bacterial illness). Only one percent of moms chose “risk of botulism” as a reason to avoid feeding honey to infants. However, when provided the specific risk of “baby may get infant botulism,” this number jumped to 43%.

According to the research, more than half of moms (57%) erroneously think children should be 2 years or older before feeding them honey.

Overall, moms expressed excitement about rediscovering honey and its uses as a culinary ingredient and as a natural cough remedy, and want to learn more about honey. “Our study showed that moms trust pediatricians and nurse practitioners the most to provide correct information about the age at which children can eat honey,” said Catherine Barry, director of marketing for the National Honey Board. “This finding confirms that we have the ideal partnership with NAPNAP for this public information campaign. Our efforts will begin this August.”

Research Methodology*The National Honey Board research was conducted by the Ketchum Global Research Network and consisted of three focus groups among moms (two in Denver and one...