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## How Has Gin and Tonic Evolved Over the Years?

### Annotated Bibliography

Buxton, Ian. *Gin: The Ultimate Companion*. Birlinn, 2021.

Although this book is about the different types of gin, there is a chapter devoted to different tonic waters and its history. This book brings the evolution of gin and tonic full circle, giving the reader a good amount of information about tonic water. The author describes the evolution of tonic from the discovery of how to extract quinine from bark, to the monopoly of the cinchona tree, to the present day use of tonics. The first producer of tonic water was Johann Jacob Schweppe in 1783, whose company dominated the tonic water market until quite recently. The ingredients within tonic have changed over the years. The amount of quinine was reduced to minute amounts, cane sugar was replaced with artificial ingredients, and even worse the introduction of drink dispenser guns in bars and restaurants which lowered the quality of the famous water even further. The author focused on one company, Fever-Tree which was established in 2005, because of their use of all natural, high-quality ingredients, offering a variety of flavours. The author has published several books about alcoholic drinks and has been working in the drinks industry for over 30 years.

Crawford, Matthew James. "Cinchona." *New World Objects of Knowledge: A Cabinet of*

*Curiosities*, edited by Mark Thurner and Juan Pimentel, U of London P, 2021, pp. 241–246. *JSTOR*, [www.jstor.org/stable/j.ctv1vbd275.40](http://www.jstor.org/stable/j.ctv1vbd275.40). Accessed 25 Feb. 2023.

Matthew James Crawford is an associate professor in the Department of History at Kent State University. He co-wrote "Drugs on the Page: Pharmacopoeias and Healing Knowledge in the Early Modern Atlantic World" and is the author of "The Andean Wonder Drug: Cinchona Bark and the Imperial Science in the Spanish Atlantic, 1630-1800." He wrote a chapter in "New World Objects of Knowledge: A Cabinet of Curiosities" detailing the medicinal properties of the cinchona tree. Crawford's chapter discusses the origin of the tree, the transformation of the bark into medicine including its migration, the teachings of the healers from Peru, and the history of

how quinine was singled out for its healing aspects for fevers, aches and pains and malaria. The medical properties of cinchona bark were known to the natives since the 17<sup>th</sup> century. They passed down their knowledge of how to cultivate the bark to younger generations. According to the author, it is through their guidance, that European's were able to isolate and extract quinine from the bark to help prevent and cure malaria.

“Everything You Need to Know About Tonic Water: The Ultimate Guide.” *YouTube*, uploaded by Tim and Tonic, 2 Dec. 2021,

<https://m.youtube.com/watch?v=8pouE0YExfg&feature=youtu.be>. Accessed 1 Mar. 2023.

The YouTube video “Everything You Need to Know About Tonic Water: The Ultimate Guide” is loaded with information about the history and evolution of tonic water, making it a good addition for this bibliography. However, research was needed to see if the author was a credible source. Through email exchange, it was discovered that Tim Laferla has been working pubs, restaurants and cocktail bars for the last 16 years buying and marketing a variety of alcohols. He has a certificate in distilling from the Institute of Brewing and Distilling and is opening his own distillery in Australia in June 2023. His expertise in the field is remarkable. He provided the sources he used while researching tonic water. In his casual, yet informative narrative, the author speaks about the history of tonic from its use to treat and cure malaria to the development of modern-day tonics.

Gachelin G, et al. (2016). “Evaluating Cinchona Bark and Quinine for Treating and Preventing Malaria.” *James Lind Library*, 2016, pp. 1-26, [www.jameslindlibrary.org/articles/evaluating-cinchona-bark-and-quinine-for-treating-and-preventing-malaria/](http://www.jameslindlibrary.org/articles/evaluating-cinchona-bark-and-quinine-for-treating-and-preventing-malaria/). Accessed 4 Apr. 2023.

The article written by Gachelin, et al is an important addition to truly understand the discovery of quinine and its uses. “Evaluating Cinchona Bark and Quinine for Treating and Preventing Malaria” explains why doctors were skeptical regarding the results of quinine used to treat malaria. Looking at many different clinical trials that were performed over a few hundred years, it was discovered that the results were skewed depending which bark was used to treat malaria. There are many different species

of the cinchona tree, so the potency between the different species affected the clinical trial results, some are even poisonous. Once the medical field was able to isolate the components and dosage that had the best results, it was determined that quinine did indeed cure malaria. The article was found in the James Lind Library which is a website that has over 1000 articles and records exploring fair tests of medical treatments. Fair tests are those that compare treatments, examine biases, interpret results, etc trying to ensure the information gathered is indeed correct.

Luciano, Pellegrino A. "When Quinine Was King: A Note on the Global Ecology of Health."

*Practicing Anthropology*, vol. 37, no. 2, 2015, pp. 31–34. *JSTOR*,

[www.jstor.org/stable/24782528](http://www.jstor.org/stable/24782528). Accessed 9 Feb. 2023.

In the article "When Quinine Was King: A Note on the Global Ecology of Health", the author discusses how quinine was used to help fight malaria. Luciano looks at the history of the spread of malaria and the tools that were used to help cure it. The economic and social constraints played a big part in the spread and treatment of malaria. It was discovered that the bark from the Cinchona tree, which contained quinine, was useful to help treat and even prevent malaria. Quinine was administered as a tea, intravenously and in tonic water. According to Luciano, once the uses of quinine were discovered, the economic impact greatly divided the social classes further promoting wealthy versus poor in the elimination of malaria. Seeds were smuggled out of Peru, Bolivia and Ecuador and new plantations were developed in other countries that were able to produce similar habitats.

This article provided information that was relevant in the evolution of quinine and therefore has useful information relating to the topic of this bibliography. The focus leaned towards the economical development of quinine and the division of classes. The Western world rates of malaria diminished faster because they were able to get access to quinine much quicker than other countries which also increased their chance of survival.

“1-Minute History of Quinine and Tonic Water.” *YouTube*, uploaded by Fever-Tree, 30 Jan.

2020, <https://m.youtube.com/watch?v=1sWtEsdglUQ&feature=youtu.be>. Accessed 1 Mar. 2023.

Fever-Tree is a company that produces a variety of tonic waters and other non-alcoholic drinks. Tim Warrillow, co-founder of Fever-Tree, travelled to the Democratic Republic of Congo and Rwanda to a Cinchona plantation (otherwise known as the Fever Tree). In this short documentary style YouTube video, Warrillow explains how tonic water came to be. In the 1800s, the medicinal value of the cinchona bark was already known to prevent and cure malaria. It was also used to reduce fevers, hence the nickname Fever Tree. When the British soldiers arrived in India, they had to take a daily morning dose of quinine, which is made out of the bark of the cinchona tree. However, quinine is very bitter. So, the soldiers tried to make it more palatable by adding it to water, sugar, local fruits and their daily ration of gin. This is the introduction of the first gin and tonic! The founders of Fever-Tree Tonic, Charles and Tim, did extensive research for eighteen-months, which led them from the British Library archives to onsite locations across the world, until they found the best ingredients for their tonic. Even though this video is only 81 seconds long, it provides a vast amount of detail which is pertinent on the subject of tonic and its history.

Simonetti, Omar et al. “The History of Gin and Tonic: The Infectious Disease Specialist Long Drink. When Gin and Tonic Was Not Ordered but Prescribed.” *Le Infezioni in Medicina*, vol. 30, no.4, 1 Dec. 2022, pp. 619-626. *PubMed*, <https://doi:10.53854/liim-3004-18>. Accessed 4 Mar. 2023.

The legends regarding the history of gin and tonic are numerous and span a great length of time. These documented uses of quinine began in the 1500s to reduce fever. But “its discovery is considered the most serendipitous medical discovery of the 17<sup>th</sup> century” (Simonetti, p.620). Once the properties of quinine were known, physicians started looking at the results to protect people against malaria. In 1820, three professors were able to isolate quinine which, when ground into a powder, enhanced its effectiveness against fever and malaria. The first

known clinical trial regarding quinine against malaria was between 1866 to 1868 and proved to be 98% effective. Quinine became a prophylaxis in the 1800s when the British soldiers were ordered to consume a daily dose to ward off or treat malaria. This medical journal is peer reviewed, discussing topics within infectious diseases, like malaria. The article has a good amount of medical research which ties in the discovery and uses of quinine, the evolution of tonic, gin and their medical properties.

Solmonson, Lesley Jacobs. *Gin : A Global History*, Reaktion Books, Limited, 2012. *ProQuest Ebook Central*, <https://ebookcentral-proquest-jac.orc.scoolaid.net/lib/johnabbott-ebooks/detail.action?docID=1124460>. Accessed 28 Mar. 2023.

Junipers, which is one of the main botanicals infused in gin, was used medically across the world for years to treat ailments such as toothaches, headaches and abortions. Bark, berries, needles, and resin were used from the plant. Jabir Ibn Hayyān invented the alebic still but didn't quite know what its use should be. Al-Razi then used the still to produce alcohol, which was used medically. Monks were known to experiment with a variety of medical tinctures where a "juniperbased distillation for bladder and kidney problems" (Solmonson, p. ) was invented. There were many deaths in Europe due to the bubonic plague which affected the workforce. Many from the country side moved into towns to fulfill the work load solidifying gin drinking. The author also mentions the benefit discovered with consuming Pink Gin on naval ships to ward off seasickness.

Stewart, Amy. *The Drunken Botanist: The Plants That Create the World's Greatest Drinks*. Algonquin Books of Chapel Hill, 2013.

This book is full of amazing botanicals, their origins, uses and how to combine them to make your perfect cocktail. However, the chapter on juniper was the most useful regarding the evolution of gin and tonic. Juniper has had ties to the medical field for centuries. Juniper berries have been boiled and the liquid used for stomach ailments including the liver and kidneys. Amy Stewart is an American author who has sold over a million books worldwide. She has extensive knowledge about plants and nature and is the co-founder of a gardening blog called Garden Rant.

Youngman, Angela. *The Weird and Wonderful Story of Gin: From the Seventeenth Century to the Present Day*. Pen & Sword History, 2022.

From seasickness to scurvy to malaria, gin has had medical links to all. *The Weird and Wonderful Story of Gin: From the 17<sup>th</sup> Century to the Present Day*, delves into the conditions on ships and how physicians tried to save those on board from different ailments. Because food and supplies became scarce on longer trips at sea, it was not uncommon for ships to lose half their crew to scurvy. Dr. James Lind discovered that the vitamin C found in lemon and lime juice prevented scurvy. Due to its bitterness, the juice was mixed with gin to make it more palatable and later became known as the Gimlet. Quinine was consumed as a tonic in gin to fight malaria. Once supplies became scarce, seeds were taken and planted in other locations to help fill the demand. An interesting point to note, if too much quinine was consumed, people were diagnosed with cinchonism, which could cause symptoms from nausea to loss of sight. Modern day tonic has very little quinine in it, so it does not ward off malaria or present a risk of poisoning. Pink Gin was invented to help with seasickness. Angostura bitters helped settle stomachs while at sea. Once again, they were too bitter to drink without the addition of gin, and turned the drink pink. Angela Youngman is a journalist who writes about food, beverage and travel.