

Sangeetha P Ramesh & Priyanka Rajasekharan

TMK College of Engineering

**Address for Correspondence: editojohp@gmail.com**

## ABSTRACT

Kerala has been a melting pot of different cultures. Cross cultural encounters with the Portuguese, the Dutch, the Jews, the Sri Lankans, the British, the French, the Chinese, the Syrian Christians and the Arabs have influenced the life style habits of the Malayalees. Kerala cuisine is no exception. The paper mentions some of the culinary dishes that have been adopted and adapted by Malayalees over the years. However owing to media exposure, popular culture, changing life style and international travel much has changed in the culinary scene of the Malayalees in the last few decades. Keralite sat once embrace diametrically opposite food like pizza, pasta, noodles, bread etc which are foreign and at the same time cling on to *puttu* and *kadala* which is considered the most preferred breakfast staple. The paper makes general mention of several dishes made in Kerala but the thrust is on broth, which is widely accepted all over the world as one of the healthiest savoured dishes. Broth is bones of mutton, or chicken cooked in a pot filled with water for a long period of time and it held an important place in many Kerala homes which served non-vegetarian food. Physicians even encouraged vegetarians to have broth as the thick semi liquid soup helped in restoring the invalid's strength and health. Thus it served a dual purpose – it was at once filling and nutritious for a normal person & recuperating for the sick. However the fact that it is an excellent fitness food is unknown to many. The Malayalee's rendition of the broth as *brath* maybe linked to its Jewish origins in Kerala. The paper dwells on the nutritional details of broth as well as the ways and means of preparing it. It also goes on to explain the variants of broth as well as the different names assigned to it. It also gives the distinction between broth, stock, soup and brew as well as the etymology of the word 'broth'. Passing mention of the broth in literature as well as in films is also elaborated in the paper.

## Introduction

The word 'food' evokes different thoughts and memories in people's mind. Usually it revolves around one's own experiences, likes, dislikes cravings etc. Sometimes, there is a tinge of nostalgia attached to a certain dish as it brings forth memories of a beloved grandmother or aunt as the case may be. Sometimes there is intense hatred for a food as you were forced to consume it as a child. Food divides and also bonds.

India is known for its diverse culture and cuisine. To understand the evolution of the indigenous cuisine of India, one must study the history of India, that depicts the arrival of a multitude of settlers with a variety of belief systems which included the Portuguese, Persians and the British who made notable contributions to the

Indian culinary scene. For instance, the tea was introduced in India by the British, which has become the favourite drink of most Indians today. Potato, the staple diet of Indians was brought by Portuguese.

|   |   |
|---|---|
| <i>Access this Article Online</i>   |   |
| <a href="http://heb-nic.in/cass-studies">http://heb-nic.in/cass-studies</a> | Quick Response Code:  |
| Received on 20/02/2019<br>Accepted on 25/02/2019 © HEB All rights reserved  |  |

Mughlai cuisine is a blend of Indian and Persian cuisines brought by Babur from Central Asia, while they also introduced the techniques like tandoor and pot roasting, dum cooking. One of the popular snack samosa was brought to India from Central Asia with its original name as samsa after the pyramids in Central Asia.

Like most other places in India, Kerala has witnessed cross cultural encounters which has been influenced its cuisine in a big way. Added to it is its religious diversity which enriches the food scenario. Kerala being a melting pot of different cultures the food that has come down to us from different origins. From the Sri Lankan influence seen in *idiappam*, the Arab in *biriyani*, the British or Syrian Christians influence in *appam* and stew, the list is endless. Some dishes have been adopted and some have been adapted for instance, in the stew, cow's milk is replaced by coconut milk. Owing to media exposure, popular culture, change in lifestyle and international travel has changed in the culinary scene of Malayalees in the last few decades. Keralites embraced diametrically opposite food like pizza, pasta, noodle, bread, etc. which was once considered foreign and at the same time clinged to *puttu* and *kadala* which is considered the most popular breakfast staple. But of course the *puttu*, while it has retained its originality, has many different variations catering to all kinds of demands.

A dish that has come down to us from the hunter gatherers' time and is gaining popularity worldwide is the broth. "Double, double toil and trouble; Fire burn and caldron bubble", (Act 4 Scene 1) chanted the witches in Shakespeare's Macbeth as they prepared their magic potion. The endless list of things tossed into the cauldron cannot be by any means called palatable or even remotely connected to the broth but the process of making broth is best described in the lines above. Known for its amazing taste and culinary uses, it has not altered much from its original recipe. It was made in most Indian homes on a regular basis. Our grandparents' generation will certainly vouch for this superfood but in the ever changing culinary landscape the broth is sadly neglected. In Kerala many old timers still remember that it was called *brath*. Whether it was a British or Jewish influence that gave such a twist to the name is debatable but about its goodness there is no doubt whatsoever. Nearly every traditional society all over the world boiled bones of meat giving animals to make a nutritive broth. This folk remedy while providing the base for soup, curries, stews and gravies also provides a cooking medium for grains and vegetables. Food for health is slowly gaining momentum all over the world. Food trends are largely driven by the millennial generation and broth is slowly gaining a foothold.

Called broth in English, *brodo* in Italian, *bouillon* in French, like many other dishes it has been resurrected from the ancient past when pots of broth were always kept simmering by the hunter gatherers. This semiliquid food is created by taking the leftover bones of an animal, adding water and simmering over low heat for a period of hours to few days while cooking nutrients are released from the bones directly into the liquid. The end result is a brew full of powerful proteins, vitamins and minerals. Bone broth has often been referred to as an *elixir du jour*. This comfort food from the time of cavemen can also contain vegetables, herbs and spices which add to the taste. It is the long simmering of the bones that creates a dense and nutrient rich broth that is also high in collagen.

### **Broth- The Magic Drink**

Certain places in India, broth is made with *toor daal* and coriander leaves. It is called *haddi ka shorba*. *Paya* is yet another broth in the Indian subcontinent. It is a traditional and nutritious food whose main ingredients are the trotters i.e., hoofs of animals cooked with various spices and herbs. Mutton *paya* soup is made from the legs of a lamb that is slow cooked and often seasoned with onions and garlic. In East Asia particularly in Japan, a form of Kelp called *Kombu* is often used as the basis for broth. It is called *dashi* in

Japanese. In the Maldives, the tuna broth known as *Garudiya*, is a basic food item. Marco Canora who has a store front window attached to his restaurant 'Hearth' in New York where broth of three different flavours are dispensed in paper cups and says that *brodo* was something they had on holidays. He grew up in an Italian household where every Christmas dinner and Easter dinner started with broth. According to Ms. Tam who writes and illustrated the popular Nom Nom Paleo blog, one of the many sources devoted to paleo eating, broth is an integral part of many traditional Chinese meals acting as a digestive palate cleanser and a drink. Chinese chicken based soups are often served with ginger, scallions and anise.

Scotch broth finds reference in literature dating back to 1600 and its popularity has crossed many borders including the US where the recipe appeared in 1881 in the American publication 'The Household Cyclopaedia'. Its popularity became so wide spread that it is sold in cases in grocery stores and even some of the biggest brands have picked it up. It is traditionally eaten as a main meal and loaded with locally available vegetables. Margret Dod of 'Cook and House Wife's Manuel' fame says that *pot au Feu* has also been referred to as 'the quintessence of French family cuisine and the most celebrated dish in France' which probably is a reflection of the important place that Scotch broth has taken at the Scottish family table for centuries. The French are known to serve it flavoured with garlic and fresh herbs. Germans enjoyed chicken soup served with dumplings. African tribes gave great emphasis on giving bone broth for babies and children.

Broth is packed with gelatine and our bodies are packed with collagen. In fact collagen is the most abundant protein found in humans. It is a primary component of tendons, ligaments, cartilages, bones, blood vessels, gut, the spinal disc and even the cornea. Over time with aging wear and tear in the body and poor nutrients collagen breaks down. The direct result shows externally in the form of aging and loose skin, wrinkles and cellulite and internally in the form of joints that do not feel as smooth as they used to.

As it contains all the ingredients necessary to build and maintain healthy connective tissue and it is in a highly absorbable form, its nutrients can be utilised more effectively. It is believed that drinking a cup of broth continuously for two weeks will bring about a visible change. Broth can be very beneficial for the people who have undergone surgery as it quickens the healing process. It relieves pain and stiffness after a minor exercise or after waking up.

Broth can solve a variety of digestive issues. It helps heal the lining of the small intestine which may have become permeable due to age, excessive alcohol consumption, poor food choices etc. Broth is also easily absorbable, thus giving the digestive system some time to rest and heal. As broth contains an amino acid called glycine, which ensures that the liver can process and remove toxins from the body, it can enhance the body's natural detoxification process. Many people find themselves deficient in the important amino acid as glycine is not found in many foods. Therefore it results in the body being unable to deal with toxins as effectively as it should.

As broth supports the healthy digestive system and there being a close link between the gut and skin it works really well on the skin. It contains most of the nutrients necessary for healthy skin. Many of the fitness gurus recommend it for its many benefits from boosting gut health and fighting inflammation to providing nutrients like magnesium, potassium, calcium, amino acids and collagen since it is high in amino acids, proline and glycine which are vital for healthy connective tissues. Glycine is also required for the synthesis of DNA, RNA and many proteins in the body. It also helps in the proper functioning of the nervous system and healing of wounds. It helps regulate the synthesis of bile salts and secretion of gastric acid. Glycine also improves muscle repair and growth by increasing levels of creatine and regulates human growth hormone from the pituitary

gland.

It is also believed to bring about a calming effect in the brain by inhibiting excitatory neurotransmitters. It also aids mental alertness, memory, boosts mood and relieves stress. The other amino acid proline has an additional role in reversing atherosclerotic deposits. It enables the blood vessel walls to release cholesterol build ups into the blood streams decreasing the size of potential blockages in the heart and surrounding blood vessels. Proline also helps the body break down protein for use in creating new, healthy muscle cells. Health benefits include inflammation reduction, reduced joint pain, decreased food intolerance and deeper and more restorative sleep.

Researchers claim that bone broth helps prevent tooth decay naturally and also help avoid gum disease. Our bodies make collagen but with age the levels decline. It is collagen that is found both in poor teeth and in the connective tissue which keeps out teeth in place. It is also said to aid mineralization and stability. Collagen also improves bone density which is vital for healthy teeth. Since broth contains high levels of collagen it's highly beneficial for dental health.

Broth's curative properties have been documented for several centuries. The editor of Chest published a study 'Chicken Soup Rebound and Relapse of Pneumonia: Report of a Case' in which patients suffering from severe pneumonia requiring thoracotomy and treatment with penicillin revived after taking chicken soup. So therefore this chicken soup is known as the Jewish penicillin. In this Jewish recipe, the tradition for broth seems to have come from Northern Europe when families would use the remaining meat bones, scrapes of meat and vegetables to cook up soup to provide flavour and sustenance for their families. It was strongly believed that no food should go waste. They simmered the soup with carrots, celery, onion, parsnips, dill and usually raised their own chickens.

In 60 AD, an army surgeon Pedanius Dioscorides working under Emperor Nero recorded in his *Farma Copesia 'De Materia Medica'* about the therapeutic benefits of chicken broth. Chicken broth was also recommended by Aretaeus the Cappadocian (2<sup>nd</sup> and 3<sup>rd</sup> century AD) especially for respiratory tract disorders. Theologian and physician Moses Ben Maimon commonly known as Maimonides prescribed chicken broth as a medication as well as an excellent food. He also recommended chicken soup to aid in the recovery from respiratory illnesses drawing his sources from classical texts. This was in the 12<sup>th</sup> century. Doctor John F. Prudden's clinical trials have proved that broth heals osteoarthritis, rheumatoid arthritis, crohn's disease and even cancer of cartilage. Physician Avicenna referenced the healing powers of chicken soup in the 10<sup>th</sup> century.

Research at University of Nebraska Medical centre has studied chicken soup's ability to inhibit neutrophil migration and thus mitigate the symptoms of the common cold and other respiratory tract infections. The research also proved that old fashioned chicken soup holds significant promise in managing the symptoms of upper respiratory tract infections due to its anti-inflammatory properties.

Although its curative properties are widely acknowledged, doubts have been raised against its harmful effects. The allegations include the high glutamate content of long cooked broth claimed to have a damaging effect on neurons and said to aggravate autism, ADHD, multiple sclerosis and other neurological disorders and heavy metal accumulation in bones (especially lead) that can seep into bones.

The concern about the first issue is that broth has high levels of glutamates. The idea is that cooking bones for a long time breaks down naturally occurring amino acids and increases the concentration of free glutamate which causes some of the problems associated with MSG and other unbound glutamate sources. However recently conducted lab tests by Covance laboratories in Wisconsin found that 8 oz of both contained

about 1013 mg of glutamic acid. It may seem like a lot but when compared to many other foods like fillet of salmon, roasted chicken breast, unsalted tomato paste and an ounce of walnuts, it is much less.

The other fear is about the bones containing dangerous presence of heavy metal which might seep into the broth. There is good likelihood of this happening from animals that are exposed to heavy metals either in their feed or environment. This fear seems to have been confirmed by the 2013 analysis of broth which found that organic chicken bones did release lead into the water when boiled. But when we look at it in the context of the environmental protection agencies' safe upper limit for lead in drinking water, it does not seem to be high enough to cause harm. Not only that, the number of nutrients abundant in the broth can help against lead toxicity to a great extent. But again, if one wish to be more cautious about broth being free from contamination he must ensure that he uses only bones from hundred percent pastured animals raised on small scale farms free from industrialised areas.

Broth, stock and bone broth are used interchangeably in traditional food circles. Broth is typically made with meat and contains a small amount of bones. It is simmered for a short period of time; it is very light in flavour, thin in texture and rich in protein. Stock is made with bones and can contain a small amount of meat. Often the bones are roasted before simmering them as this technique greatly improves the flavour. It is rich in gelatine and minerals as it is simmered for three to four hours. It is thus cooked for a shorter period when compared to broth.

Bone broth is thicker in consistency due to gelatine and hours of simmering. It is like a really good stock made with more actual meat. It is roasted first to improve its flavour. This long cooking time helps to remove as many minerals and nutrients as possible from the bones into the broth so that the bones crumble when pressed lightly between the thumb and forefinger. Many people use the terms interchangeably but stock has a higher proportion of bones to meat.

One finds broth alluded to in literary works, for instance in Byron's Don Juan (Canto VIII) he begins stanza 24 of that canto by saying, "but Juan was quite a broth of a boy". In the preceding stanza he has described this as an Irish phrase. Here broth of a boy means a robust boy, an Irish term but yet not unknown to England and America. As broth is the essence of meat, a broth of a boy is the essence of what a boy should be, spirited and passionate. The phrase is mentioned in the Handy-Book of Literary Curiosities page 121 by William Shepard Walsh. Irish *brotha* also means passionate and spirited. Thus the idiom broth a boy means a sturdy youth. Old English broth is from proto-Germanic 'bruthan'. The verb root 'bhreue' means to heat, boil and bubble, liquid in which something has been boiled. Old English 'breowan' means to brew. Sanskrit 'bhurnih' means violent passionate. Old High German 'brato' means roast meat. Hence, the original sense of the broth means a drink by boiling.

The proverb 'too many cooks spoil the broth' dates back to at least to the late medieval period. In 1575 it was cited by the writer George Gascoigne who noted that this was a common proverb. 'He who has eaten of the pot knows the taste of the broth' is yet another broth related proverb.

## Conclusion

Unparalleled in flavour, broth can also be compared to the magic potion brewed by Getafix which gave Asterix and the Gaulish warrior's super human strength. Brewed from various herbs found around the village and the forest surrounding it, the brew also had fish as one of the main ingredients. Here one can only agree with Sally Fallon Morrel author of the book 'Nourishing Broth' when she says of broth that the recipe has so much tradition behind it, this must certainly have the backing of science. According to the food and agricultural organization of the UN (the state of food security and nutrition in the world, 2018), the number of under nourished people has been in the rise since 2014 and an estimated 21 million in 2017. As broth is not only cheap but easily available and simple to cook as well as a highly nutrient dense food it will certainly benefit them.

“Good broth will resurrect the dead”, says an old South American proverb. It is an exaggeration doubtless, but certainly close to the truth as broth soothes one during an illness and boosts one's immune system even if the person does not have an appetite. It is a powerful tonic that can easily be added to the family's diet. Thus, broth can, in all probability, be the right choice in man's eternal quest for perfect health.

### References:

- . “Basic Information about Lead in Drinking Water.” Ground water and Drinking Water, United States Environmental Protection Agency, <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>. Accessed on 18 Jan. 2019
- “Broth.” Wikipedia, The Free Encyclopedia. Wikimedia Foundation, Inc. 18 Jan. 2019. Web. 19 Jan. 2019.
- “Double Double Toil and Trouble.” Shakespeare Quotes and Plays, 2019, <http://shakespearequotesandplays.com/macbeth-2/important-macbeth-quotes/double-double-toil-and-trouble-analysis/>. Accessed on 20 Jan. 2019
- Johnson, Jon. “Benefits of Bone Broth.” What are the benefits of Bone Broth?, Medical News Today, 5 Dec. 2018, <https://www.medicalnewstoday.com/articles/323903.php>. Accessed on 15 Jan. 2019
- Lewis, Jeanine. “History of Indian Culture.” The Culinary Scoop, Cuisine Noir Magazine, 21 Feb. 2011, <http://www.theculinaryscoop.com/2011/02/history-of-indian-cuisine/>. Accessed on 18 Jan. 2019
- Poythres, Alex. “Bone Broth History- Goodness Through the Ages.” Inside Bare Bones, 1 April 2016, <https://blog.barebonesbroth.com/goodness-through-the-ages/>. Accessed on 17 Jan. 2019