



## Sikkim the Only Green State of India Where People Uses Mother Nature Foods in Kitchen: Key to Lead a Healthy Lifestyle

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**Received Date:** March 25, 2025; **Published Date:** April 30, 2025

### Abstract

“Sikkim”, small but beautiful is the only “Green State” in our country. Our state is not only accredited as green state by our Union Government (INDIA) but also achieved this reward in “International level” by the United Nations “Food & Agricultural Organization” in 2018 at Rome. The state emphasizes in “Green Organic Mission” and pesticide free production of vegetables and fruits. Till 2018, though few amounts of food items (not organic or pesticide free) were imported from other states of our country but from 2019 onwards (especially COVID19 era) our state government has imposed complete ban in the use of pesticides in the production of “Mother Nature” vegetables and fruits as well as many restrictions have been imposed in bringing imported food items including packaged drinking water bottles from other states. This is how our “Organic Mission” has been uplifted by the state government to become a “Model State” not only in our country but also in the International level as well. In this ‘mini review or opinion’ the focus is mainly how mother nature vegetables, fruits, fishes, meats and many other daily food items can be grown without adding chemical fertilizers and pesticides and we may live a healthy life.

**Keywords:** Sikkim State; Organic Mission; Mother Nature Foods; Healthy Lifestyle

### Introduction

Mother Nature's Food is a uniquely balanced approach which includes nutrition, exercise and lifestyle changes that can bring a healthy disease-free life for the mankind. It's a simple diet that we can easily follow in our daily life. In fact, the benefits of mother nature include not only nature's own created food items (vegetables, fruits, eggs, milk, nuts, pulses, fishes, meats and many more) but also gives us an opportunity to avoid various kinds of frozen and packaged food items which has become a part and parcel in our kitchen

due to our busy schedule in daily life nowadays. It also gives us an opportunity to lead a deadly disease-free life avoiding junk foods, processed foods and various imported frozen food items like (tuna fish, sea fishes & meats of rare animals). These are usually responsible for various diseases and may cut short our normal life span. Modern research reveals Tuna and other sea fishes contain mercury in their brain which is highly detrimental to our health. Once we become habituated in mother nature diets, we'll have more energy to do the things we love, our thinking will become clearer and we may live a longer and healthier life.

Eating natural, seasonal food also contributes medicinal values to our body. If we think scientifically, we will find our mother nature produces different kinds of vegetables, fruits and other food items which are different in all seasons (summer, monsoon, winter, spring and autumn). The food values of each vegetable, fruit, milk, eggs, nut and fishes from running river as well as natural meats from goats and hen etc. all contains essential protein, fat, vitamins, minerals which increases our immune systems to a great extent. 'Mother Nature' created rice, flour, maize for us and all of these produces energy in the form of starch (a broken product of carbohydrates). Therefore, our best possible means of keeping good health is to adopt mother nature food items and especially locally produced foods free from pesticides and artificial chemicals which enhance the rapid growth of vegetables and fruits. This contributes to make a person healthy and nurtures nature at the same time. Fruit and vegetables contain virtually all the essential vitamins and minerals and are also full of fiber. These properties make them as highly potential diet items and a great way to stay satisfied while eating nutritiously as well as contributing to healthy weight management. They are low in calorie density, so we can eat plenty of them. All the Mother Nature foods happen to be such a healthy and wonderful diet based on a sustainable food system [1].

The basic principle of "Mother Nature Food" is every food creation is built up out of at least three layers of goodness: "Soil, Earth and Surface".

- The first layer, soil, consists of vegetables that grow in the ground also known as underground crops like potatoes, asparagus, beetroot, radish etc.
- The second layer, earth, is made up of edible "earth" like tomato, pumpkin, cabbage, cauliflower, broccoli, cranberries as well as different kinds of seeds and nuts. These are also known as ground level crops.
- Finally, the surface symbolizes everything that grows on fertile lands like all fruits, vegetables, cress and flowers. These are referred as tree crops. Food is the inseparable link between human health and environmental sustainability. We have to create a "local food system" that operates between the boundaries of human health, reliable food production and what the earth can provide. The mother nature principle just happens to be such a healthy diet based on a sustainable food system [2,3].

## Observations and Findings

From my personal experiences, while visiting and residing the European countries like United Kingdom (Somerset County near Bristol), Greece (mainly in the islands like Hydra) and the country sides of France, I have been inspired by the local cuisines, using the 80-20-principle of eighty percent (locally grown) vegetables and twenty percent meat. This basic principle of "Mother Nature Food" is a concept

that can be implemented worldwide if we so desire. Highly hygienic, healthy, nutritious, full of vitamins & minerals as well as dietary fibres along with adequate amounts of protein, carbohydrates and fats respectively. These local cuisine dishes can be served sweet or salty, as a starter or as a main course, in a glass or a bowl, on a plate or on a spoon [4].



Figure 1: Mother Nature Food.

## Organic Vegetables and Fruits: A County Picture of Somerset Near Bristol, UK

The "Mother Nature" principle helps us to experience the endless possibilities. This principle educates us about the reasons why we eat, the origins of our food and the emotion which is associated with our ancestor's passion. Today's slogan "Vocal for local" is exactly what we should follow in our daily dietary habits adopting only local foods which are fully "Organic" in nature. In this connection, my experiences in staying in our state Sikkim for about 32 years, I am so proud to say that our state, Sikkim is India's first "100% Organic state" and is happened so due to the devotion and efforts of our government through its "Sikkim Organic Mission," which completely removed the usage of chemical fertilizers and pesticides and promoted organic vegetable cultivation which has benefited more than 66,000 farmer families. "Sikkim" is the only "Green State" in our country and is declared by the Government of India in 2016. United Nation's acknowledged "Sikkim's Organic Mission" in the year 2018 and our state received "Future Policy Award" beating 51 nominated policies of different nations to grab the award from UN's FAO (Food & Agriculture Organization) at Rome under the "Green Mission" initiated by former Chief Minister Shri P.K Chamling.

During the year 2019 (Covid19 era), our state government left no stone unturned to implement a strict resolution to maintain the status and fully shifted towards “*Organic Farming*” with an aim to ban the usage of chemicals and pesticides in farming under the dynamic leadership of our present Honourable Chief Minister Shri P.S. Golay Sir who is always devoted to our state for its sustainable development.

A brief statistical data of the major crops of Sikkim has been illustrated in the following tabular form for the awareness of the readers how “Pesticide free pure organic farming” is being continuing and also the average production of selected crops is also depicted. The tabular data has been shown as updated in 2021-2023 (ENVIS Hub: Sikkim Status of Environment and Related issues).

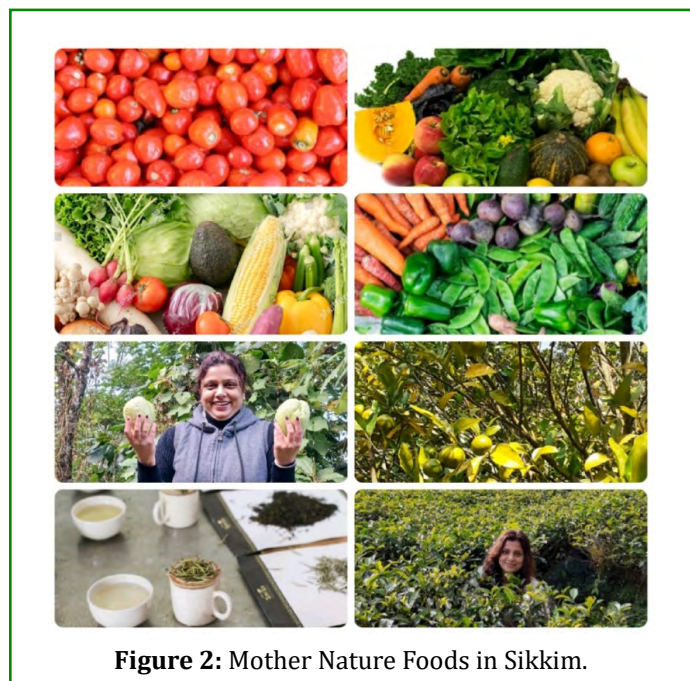
Serial No	Name of the Crop/vegetable/fruits	Area in 000 hectares	Production (000MT)	Average yield (kgs/ha)
1	Rice	13.44	22.4	1874.3
2	Wheat	0.64	0.68	1158.8
3	Millet	3.78	3.93	1810.2
4	Soybean	3.98	3.95	957.44
5	Guava	1.778	1.114	1475
6	Orange	10.564	17.764	3424
7	Peach	0.244	0.197	1590
8	Pear	1.886	2.128	3543
9	Passion Fruit	0.788	0.346	267
10	Papaya	0.245	0.446	1230
11	Banana	1.887	3.122	6846
12	Beans	1.226	6.121	5226
13	Brinjal	0.31	2.133	6885
14	Bottle gourd	0.201	0.192	8242
15	Bitter gourd	0.344	0.28	6332
16	Broccoli	0.144	0.755	5122
17	Cabbage	1.566	8.022	6442
18	Cauliflower	0.802	4.238	5788
19	Carrot	0.421	2.986	8004
20	Chilly	0.095	3.446	3562
21	Cucumber	0.072	0.247	4675
22	Leafy vegetables	2.676	12.856	4944
23	Pea	2.224	10.232	4772
24	Radish	0.786	6.121	7661
25	Tomato	1.012	8.224	9125
26	Potato	1.102	9.164	9249
27	Cardamom	17.102	4.127	277
28	Ginger	9.432	56.624	5773
29	Turmeric	1.376	4.886	3755
30	Lady's finger	1.244	8.553	6884

**Table 1:** Representation of Pesticide free organic farming crops data in Sikkim.

As a result, Sikkim is known as one of leading states fulfilling “*Mother Nature Foods*” in the World. Now, it's high time to adopt “*Mother Nature Foods*” (all the vegetables, fruits are

fully organic in our state) as “*first priority*” to establish and showcase our state as a “*Model State*” which gives priority to “*Mother Nature Foods*”. But in spite of having all the potentials

to adopt “*Mother Nature Foods*” it’s quite unfortunate that the few people residing in the urban areas, especially municipal corporation areas of Gangtok and surroundings are habituated with processed foods, frozen and junk foods available in shopping malls and supermarkets, all of them contains health hazardous chemicals. Therefore, these people are facing many serious health issues while people living in the various parts of the villages in Sikkim are following the basic principles of “*Mother Nature Foods*” though many of the village people are not aware of this terminology [4].



**Figure 2:** Mother Nature Foods in Sikkim.

### Organic Vegetables, Fruits and Tea of Sikkim

Our picturesque state in northeastern India, holds the distinction of being introducing first ever pesticide free “*Tea*” in our country in 1993. Though we were not accustomed to the terminology “*Organic*” in those days but our state bagged “All India Quality Award” by the “The Tea Board of India” for high quality pesticide free “*Tea*” produced at the “*Temi Tea Garden*” for two consecutive years of 1994 and 1995 superseding world class Darjeeling tea. Almost seventy-five percent of the tea produced in the garden is auctioned in Calcutta and the remaining twenty-five percent is marketed locally as packaged tea in the domestic market. Though, Russia is our biggest buyer of “*Temi Tea*” but this “*Organic Tea*” is exported in almost 80 countries globally (via Government of India), with United States, Germany and United Kingdom standing as the principal importers (updated till June 28, 2024) [4].

Highly processed foods, far away from natural foods are dense with numerous manufactured additives which includes artificial colors, flavors and sweeteners, preservatives,

thickeners, mono sodium glutamate (MSG), gum, corn syrup, sugar, unhealthy fats and many more. All the items are highly detrimental to our health. In addition, processed foods and beverages provide only a fraction of original natural products. Such food items are just a warning to all of us because they are composed of unnatural foreign substances that our bodies don’t recognize and are frequently unable to use or detoxify. Consequently, unhealthy chemicals accumulate in our cells, organs and gradually contributes to the development of chronic diseases including cancer. Also, intensive processing of these foods greatly diminishes or completely depletes them of their natural nutrients which are vital to the functioning of the body’s trillions of cells and their ability to maintain good health and fight diseases.

Hence, the solution is simple. Eat preferably organic foods, that are closest to their natural state, fresh vegetables raw or briefly cooked, instead of produce in coffins (canned ones), or precooked frozen dinners. For example, if we see commercial salad dressing ingredients list in a hotel that will surely scare us into making our own salads which we prepare regularly in our kitchen within a few minutes which are also tasty and healthy where also we may add various veggies. A basic mother nature food salad may be with inclusion of extra virgin olive oil, salt and pepper. Substitute nutritious whole grain products, such as brown rice, pasta, bread, pita, oats, barley and corn tortillas are made of processed and nutritionally depleted grains. Even generic salt is intensively processed. Instead, we should use “*Himalayan Pink Salts*” (purely natural). We should drink mainly plain (filtered) water, not health-sabotaging, chemically dense sodas of all kinds, or other commercial sweetened beverages and “energy” drinks. Bottled fruit juices are added with artificial colours and flavour along with preservatives like “Sodium Benzoate”. So, consuming bottled juice is harmful to our health because the fruit’s pulp, which slows absorption, was removed. A high concentration of fructose (fruit sugar in the juice) causes a rapid rise in blood glucose and is a major contributor to a variety of chronic diseases. Eating fruit whole is a much better choice. Hot or cold additive-free home prepared herbal teas are another good option. Pastries and frozen desserts are loaded with sugar, artificial food colors and flavors, unhealthy fats, white flour and other health saboteurs. Good fats, consumed in moderation, such as extra virgin olive oil, avocado, nuts, seeds, fish and lean meat helps in supporting our health [5].

### Conclusion

Therefore, in my opinion the message is very clear to all of us. If we fully devote ourselves into mother nature foods and slowly start avoiding processed, bottled, canned and junk foods as well as bringing “*Mother Nature Foods*” in our kitchen we may save incredible amounts of time spent in doctor’s

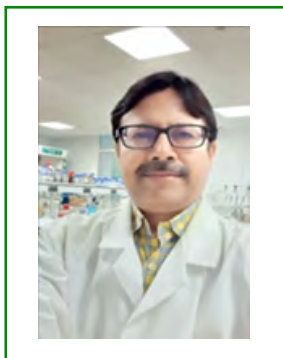
chamber, medical tests and hospitals followed by staggering medical bills. It also prevents a great deal of unnecessary suffering and a diminished quality of life. Foods in their natural state provide nutrients in the right combinations for maximum benefits. Though in our country, Punjab had shown us first "*Green Revolutions*" in 1965-66 but unfortunately the sustainable developments in agricultural areas in the state were not properly maintained and continued. Presently in addition to our state, Mizoram, Madhya Pradesh, Rajasthan, Uttarakhand and Odisha are actively implementing green agricultural practices to promote sustainable farming and environmental conservations. We do believe our remaining states will also join slowly in this mission to implement use of "*Mother Nature Foods*".

### Take Home Message

We all know and familiar that food industry has convinced millions of us that replacing fresh whole foods with highly processed, mass-produced, fast food, junk food and precooked which are our regular dishes before going to office or watching a TV show at our dinner time. We can see the consequences of such lifestyle choices all around us. So we should take charge of our health, empower our self to exercise our right to choose health over disease. It's never too late to start! We are part of nature and one thing we should realize is that we must give space to other living and non-living things in nature. Let nature's pharmacy be our health support team.

**The "Article" is dedicated to Honourable Chief Minister of Sikkim Shri P.S Golay Sir & Government of Sikkim on the occasion of "50 years of Democracy in Sikkim & advances in Agriculture and Sustainable Developments to become first ever Organic State of India"**

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Dr. Bhaskar Chakraborty, Professor of Organic Chemistry at Sikkim Government College (An Extension Centre of

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