Soil Mineral Deficiency and Viral Mutation: Nutritional, Agricultural and Geographic Influences

by David E Marsh

Why do so many devastating influenza such as Beijing flu and avian flu, originate from China? Could the answers lie with the mineral levels in the soil?

Viral mutation rates increase in selenium deficient conditions. Soils worldwide, and in China particularly, became impoverished in the 20th century since artificial fertilizer use and intensive agriculture. Plants cannot make minerals, being able only to obtain minerals from the soil. Artificial fertilizers contain only three or four minerals: fertile soils contain upwards of 60, as does the blood of mammalian species. Mineral starved soil produces mineral-deficient crops, animal and human populations with poor immune function. Specific types of volcanic rock contain 80plus minerals and trace elements and are widely available. When broadcast on soils it functions as a ‘carbon-sink’.

History of Soil

The minerals in our soil have their origins in fire and ice. From their production in the nuclear furnace of the sun, to their journey on the split chunk of molten matter from the sun that became our planet home: via earth’s cooling and billions of years, volcanoes, fires and brimstone, the formation of water, then ice, to the bodies of micro-organisms, viruses, bacteria and living organisms, and eventually to us where they act as prerequisites for literally thousands of quintessential health-maintaining biochemical reactions.

There have been 17 ice ages in the last 1.7 million years. As ice floes moved mountains and rocks to and fro over land surfaces, the grinding of the rock which contained the minerals and trace elements were left in their wake, leaving fertile soil. Between the ice ages (interglacial) this soil grew plants and trees on which animals and then people lived.

With the average ice age lasting 90,000 years and the average length of interglacial roughly 10,000 years, the fertility of the soil grew less through weathering, leaching, grazing and cropping. Our current interglacial (now 10,800 years old) is the first in which agriculture has been practiced.

Subsequently through use, and over use, with insufficient replacement materials put back into the soil, we are left with soils the world over with greatly reduced mineral content. The development of artificial fertilizers around 1850s and the downgrading of the importance of the environment after Charles Darwin’s theory of natural selection was overinterpreted, omitting Darwin’s emphasis on the crucial role of what he termed ‘the
conditions of existence has left our soils sadly impoverished.

Selenium: Mineral Deficiency in Soil

Viruses and bacteria mutate more readily in selenium (Se) deficient environments, be such environments living bodies or the soil. Soils in different parts of the world, and in different localities within specific areas, have higher or lower amounts of certain minerals.

Specific disease patterns present themselves in defined areas, such as Keshan’s disease in China. Keshan’s is a form of heart disease suffered by people living in a broad swathe across China, running from the south-west up to the north-east in an area of known selenium deficiency. Keshan’s is linked with Se deficiency.

As more and more food is being imported from China, some of these foods, such as garlic, (an important product currently gathering in 10,000 ton heaps around open-cast volcanic rock mines, waste product of the road building industry. Ground rock dust which naturally contains upwards of 60 minerals, including Se, and a highly desirable alkalinity (pH 10 +). (It also contains fluorine and would seem a better alternative than adding fluorides to our water supplies.) It is being used in Scotland, particularly around Pitlochry and Dundee, which Tayside Contracts provide as a hitherto unusable by-product (tiny particles and dust) left over at the end of producing tar macadam for the roads and motorways.

Moira and Cameron Thomson of the SEER Centre research unit are pioneers (UK) using this rock dust. They are working in association with Glasgow University with Professor Hugh Flowers, and achieving inspirational results on their six acres of gardens 1,000 feet above sea level amidst the Highlands, on notoriously acid soil (pH 4.5). The produce from their land is of Findhornian proportions with high mineral content.

Similar ground rock has been used for decades by the well-known Swiss firm Biotta, as fertilizer for a fatal virus. What if there were no conkers.

So, in a worst-case scenario, mineral deficiency could slowly cause the death of other parts of our known and loved environment. Bearing in mind many soils internationally are Se (and other minerals) deficient it would seem a simple, not hugely expensive, operation to apply mineral dressing to all our soils where it is found deficient, both cultivatable land, grass or forest, lake or pond.

Better still, we should use the end product currently gathering in 10,000 ton heaps around open-cast volcanic rock mines, waste product of the road building industry. Ground rock dust which naturally contains upwards of 60 minerals, including Se, and a highly desirable alkalinity (pH 10 +). (It also contains fluorine and would seem a better alternative than adding fluorides to our water supplies.) It is an inexpensive, highly valuable fertilizer, with proven qualities (see Sustainable Ecological Earth Regeneration (SEER)).

It is being used in Scotland, particularly around Pitlochry and Dundee, which Tayside Contracts provide as a hitherto unusable by-product (tiny particles and dust) left over at the end of producing tar macadam for the roads and motorways.

Moira and Cameron Thomson of the SEER Centre research unit are pioneers (UK) using this rock dust. They are working in association with Glasgow University with Professor Hugh Flowers, and achieving inspirational results on their six acres of gardens 1,000 feet above sea level amidst the Highlands, on notoriously acid soil (pH 4.5). The produce from their land is of Findhornian proportions with high mineral content.

Similar ground rock has been used for decades by the well-known Swiss firm Biotta, as fertilizer for a fatal virus. What if there were no conkers.

So, in a worst-case scenario, mineral deficiency could slowly cause the death of other parts of our known and loved environment. Bearing in mind many soils internationally are Se (and other minerals) deficient it would seem a simple, not hugely expensive, operation to apply mineral dressing to all our soils where it is found deficient, both cultivatable land, grass or forest, lake or pond.

Better still, we should use the end product currently gathering in 10,000 ton heaps around open-cast volcanic rock mines, waste product of the road building industry. Ground rock dust which naturally contains upwards of 60 minerals, including Se, and a highly desirable alkalinity (pH 10 +). (It also contains fluorine and would seem a better alternative than adding fluorides to our water supplies.)

It is an inexpensive, highly valuable fertilizer, with proven qualities (see Sustainable Ecological Earth Regeneration (SEER)).

It is being used in Scotland, particularly around Pitlochry and Dundee, which Tayside Contracts provide as a hitherto unusable by-product (tiny particles and dust) left over at the end of producing tar macadam for the roads and motorways.

Moira and Cameron Thomson of the SEER Centre research unit are pioneers (UK) using this rock dust. They are working in association with Glasgow University with Professor Hugh Flowers, and achieving inspirational results on their six acres of gardens 1,000 feet above sea level amidst the Highlands, on notoriously acid soil (pH 4.5). The produce from their land is of Findhornian proportions with high mineral content.

Similar ground rock has been used for decades by the well-known Swiss firm Biotta, as fertilizer for a fatal virus. What if there were no conkers.

So, in a worst-case scenario, mineral deficiency could slowly cause the death of other parts of our known and loved environment. Bearing in mind many soils internationally are Se (and other minerals) deficient it would seem a simple, not hugely expensive, operation to apply mineral dressing to all our soils where it is found deficient, both cultivatable land, grass or forest, lake or pond.

Better still, we should use the end product currently gathering in 10,000 ton heaps around open-cast volcanic rock mines, waste product of the road building industry. Ground rock dust which naturally contains upwards of 60 minerals, including Se, and a highly desirable alkalinity (pH 10 +). (It also contains fluorine and would seem a better alternative than adding fluorides to our water supplies.)

It is an inexpensive, highly valuable fertilizer, with proven qualities (see Sustainable Ecological Earth Regeneration (SEER)).

It is being used in Scotland, particularly around Pitlochry and Dundee, which Tayside Contracts provide as a hitherto unusable by-product (tiny particles and dust) left over at the end of producing tar macadam for the roads and motorways.

Moira and Cameron Thomson of the SEER Centre research unit are pioneers (UK) using this rock dust. They are working in association with Glasgow University with Professor Hugh Flowers, and achieving inspirational results on their six acres of gardens 1,000 feet above sea level amidst the Highlands, on notoriously acid soil (pH 4.5). The produce from their land is of Findhornian proportions with high mineral content.

Similar ground rock has been used for decades by the well-known Swiss firm Biotta, as fertilizer for a fatal virus. What if there were no conkers.

So, in a worst-case scenario, mineral deficiency could slowly cause the death of other parts of our known and loved environment. Bearing in mind many soils internationally are Se (and other minerals) deficient it would seem a simple, not hugely expensive, operation to apply mineral dressing to all our soils where it is found deficient, both cultivatable land, grass or forest, lake or pond.

Better still, we should use the end product currently gathering in 10,000 ton heaps around open-cast volcanic rock mines, waste product of the road building industry. Ground rock dust which naturally contains upwards of 60 minerals, including Se, and a highly desirable alkalinity (pH 10 +). (It also contains fluorine and would seem a better alternative than adding fluorides to our water supplies.)

It is an inexpensive, highly valuable fertilizer, with proven qualities (see Sustainable Ecological Earth Regeneration (SEER)).

It is being used in Scotland, particularly around Pitlochry and Dundee, which Tayside Contracts provide as a hitherto unusable by-product (tiny particles and dust) left over at the end of producing tar macadam for the roads and motorways.

Moira and Cameron Thomson of the SEER Centre research unit are pioneers (UK) using this rock dust. They are working in association with Glasgow University with Professor Hugh Flowers, and achieving inspirational results on their six acres of gardens 1,000 feet above sea level amidst the Highlands, on notoriously acid soil (pH 4.5). The produce from their land is of Findhornian proportions with high mineral content.
their organic fruit and vegetable juices\textsuperscript{20-27} (Hill, Breuss). Further, it has been used for decades in the USA, where ‘Azomite’ rock is mined in Utah.\textsuperscript{20}

Rock dust can be spread around trees, and fed to animals. Poultry will take it as grit, leading to eggs with harder shells as well as higher mineral content. The use of azomite in the US has demonstrated boosting immune response in poultry, and bringing sick trees back to health.\textsuperscript{29}

SEER is also working with several well-known and highly respected Scottish Corporations. This ground rock dust even draws carbon dioxide from the atmosphere to feed the microorganisms in the soil, which after their cycle of activity and death then sink down in the subsoils. This ‘carbon sink’ mechanism could be employed worldwide to counteract global warming.\textsuperscript{20,24}

**Conclusion**

If undertaken via the legislature on an European level, within a few years the mineral levels of humans, animals, birds, trees and plants and all creatures that live on them would be well on the way to restoration. The results would be greater resistance to disease (more efficient immune systems), healthier and more nutritional plants, and less influenza. As importantly, it could play a vital role in reducing atmospheric carbon dioxide levels.

Medical, nutritional, veterinary, agricultural and soil scientists should have a conference discussing this important subject, before applying to the EU for funding.

---

**References**

17. Thomas D, M.Sc, D.I.C. A study on the mineral depletion of the foods available to us as a nation over the period 1940-1991. The data used as the basis of this study was published in five editions, initially under the auspices of the Medical Research Council and later the Ministry of Agriculture, Fisheries and Foods and the Royal Society of Chemistry. Authors McCance RA and Widdowson EM. Nutrition and Health. Vol 17. No 2. 2003. See also Kendall P. Daily Mail. March 5, 2001.

For more information on 'Sudden Oak Death', Lee Klinger, Sudden Oak Life. PO Box Big Sur. CA 93920; (831) 917-7070; info@suddenaklife.org. www.wnrmag.com/stories/2002/aug02/chest.htm.


23. www.mccarrisonsociety.org.uk The McCarrison Society for Nutrition and Health. Founded in 1966 and named after the late research doctor, Major General Sir Robert McCarrison, CIE MA MD DSc LLD FRCP. Major-General IMS (retd). Formerly Director of Research on Nutrition. Pioneer of nutrition and one of the leading figures in formulating the diet of the British nation during WW11 in Lord Woolton’s Ministry of Food. It is notable that the UK population was in better health after the war than it had been before. See Nutrition and Health (originally given as the Cantor Lectures entitled Nutrition and National Health). Delivered before the Royal Society for Arts. 1936.


28. Cook et al. Sheep Red Cell Challenge Study. University of Wisconsin (three week old broilers; AZOMITE® vs. control. P<0.05).

About the Author
David Marsh Dip Agric is a freelance author who writes books and articles for various journals in the fields of nutrition, evolution, environment and complementary medicine. He is co-author with Prof MA Crawford of The Driving Force, Food in Evolution and the Future. Heinemann (London) and Harpers and Row (NY) 1989, 1991, and Mandarin: and Nutrition and Evolution, Keats, Connecticut, USA. 1985. He is also co-author with Chandra Masoliver of The Fish's Vegetarian Vitamin and Mineral Cookbook* and In Two Minds*: on the possible effects of Film and TV on the Human Mind.* He currently edits the newsletter for the McCarrison Society for Nutrition and Health (www.mccarrisonsociety.org.uk). He may be contacted via david@davidmarsh.org.uk; www.davidmarsh.org.uk

To subscribe or renew your subscription log onto www.positivehealth.net

Tel: 01442 879097

12 Issues of Positive Health £54

The UK's Leading Complementary Medicine Magazine
Copyright of Positive Health is the property of Positive Health Publications, Ltd. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.