

“We are what we eat”

Over the last one hundred thousand years, since modern humans left Africa, our ancestors have adapted to an extraordinary range of diets and life styles.

In our traditional homeland of Africa, humans began as browsing omnivores harvesting a wide range of seasonal plants, animals and insects associated with their home range. Where food supplies were plentiful, human populations stabilised in one location, but changing climates, seasonal factors and population pressures forced some groups to forage over extended areas.

When some of these foraging groups left Africa they probably followed coastlines and rivers where food was plentiful. Subsequent changes in sea levels and flood patterns have destroyed much of the evidence so it is impossible to be precise in following their movements. However the evidence is strong that modern humans were living in Australia around 50,000 years ago, in Europe 30,000 years ago, Asia (18,000), the Americas (12,000) and in much of Oceania (2000). In each of these areas our human ancestors adapted to a range of different foods based on the plants and animals they found there.

There is a popular idea that hunter-gather societies are somehow primitive and ignorant, not necessarily as people (although this racist view is still all too common) but their *culture* is primitive. In fact all human cultures (both within and outside Africa) have evolved in different directions and all have developed rich creative languages, belief systems, and importantly, extraordinarily diverse dietary practices.

For example, the first Australians valued their subsistence (hunter-gather) life style and their need for little in the way of material goods. They had something better than stuff: a complex social and spiritual belief system. The social structure of Aboriginal society into some 600 small, local and essentially autonomous groups, speaking some 200 distinct languages is the key to understanding their dietary habits. Each group occupied an area roughly proportional to the type and supply of the available food. Their food gathering and hunting techniques were highly efficient, leaving lots of time for social and artistic pursuits. They were eager to differentiate themselves from their neighbours and used language creatively to help them do that. They were in the business of enjoying life, not exploiting it and only took what foodstuffs they needed at the time, always ensuring enough fruit and animals survived for the next generation.

By comparison, the materialist and exploitative culture pursued by the West is arguably more primitive and certainly the more destructive.

Around 10,000 years ago, some groups started farming. In the Middle East and Africa and later North Africa, this centred on growing wheat, in Asia on rice, North America on corn and South America on the potato. Alongside these staples a small number of animals were domesticated primarily for food: poultry and pigs in Asia, sheep and goats in the Middle

East, cattle in Africa and Europe. But also horses, camels and oxen were used for transport and traction.

In areas unsuitable for agriculture, hunting and gathering continued until recent times: in the far north among the Laplanders and Inuit, for example, and in arid regions of Central Australia and the Kalahari: the Western Desert peoples and Bushmen.

It is important to note however, that the archaeological remains of the early farmers that have been unearthed show that they were smaller and had a shorter life expectancy than their hunter-gatherer ancestors. The explanation for this is that the less varied diet impacted on their size and living in one place gave rise to sanitary problems and a propensity for infectious diseases that were virtually unknown in hunter-gather societies.

There is an important paradox here: although farmers were smaller, less healthy and had shorter life expectancies than their hunter-gather forebears, farming technologies could support many more people and as a result populations increased dramatically.

With European expansion beginning in the 15th century and the extension of traditional trade routes, domesticated plants and animals were moved around and with it the dietary habits again changed with food stuffs from the old world moving to the new and vice versa. For example potatoes and corn went west and wheat and rice went east.

The industrial revolution brought rail, steam and later refrigeration, thus enabling food to be moved great distances, making a wider range of foodstuffs potentially available, but the benefits of this were very uneven.

Industrialisation needed a large workforce resulting in the movement of large numbers of people to the cities. Despite the additional food being available, people's size and life expectancy again declined. Life expectancy was so short in the industrial cities of England, for example, that it was only through the constant supply of rural and child labour that the satanic mills could keep operating.

The last great change has occurred with the advent of industrialisation of agriculture and food processing over the last 50 years. As with the previous three revolutions (from hunter-gathering to farming to food transportation), the industrialisation of food production has resulted in a system that can support a larger a population, but it comes at a terrible price: with almost a third of the global population suffering from malnutrition and hunger while another third from obesity. Again, as with the other revolutions, except for wealthy people, life expectancy appears likely go down while populations increase inexorably.

HSA sees sustainable agriculture and especially soil health as the only way of addressing these challenges.

- John Schooneveldt 2010