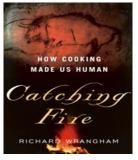
Book Title: Catching Fire: How Cooking Made Us Human

Book Cover:



Author: Richard Wrangham

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Review Title: I braai, therefore I am

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I BRAAI, THEREFORE I AM

This is a big book about how and why the human world has come to be the way it is. Notwithstanding a glib cover endorsement from celebrity chef, Nigella Lawson, *Catching Fire* bears comparison to other modern classics on evolutionary biology and environmental determinism, such as Stephen Jay Gould's *Mismeasurement of Man* (1981) and Jared Diamond's *Guns, Germs and Steel* (1997). A British primatologist and Professor of Biological Anthropology at Harvard University, Richard Wrangham, has spent a long time chewing over the behavioural ecology of apes and, as this volume reveals, he has not been taken in completely by his tree-hopping research subjects.

Wrangham has tried Ugandan chimpanzee cuisine and is unimpressed. Fancy tropical fruits are not particularly nutritious and have even less sugar than a carrot. Unlike carrots, though, they take an age to chew and digest when boiled or steamed. It is no small wonder that our close relatives have a large intestine twice the size of ours. According to Wrangham's study, this difference – or how it materialised – is the crucial evolutionary distinction between *Homo sapiens* and the rest of the primates, more than half of whose waking hours are devoted to grinding their teeth. We, on the other hand, are an ape that can braai, boil and bake. And that culinary ability is why we are no longer swinging from the trees.

As an anthropological scholar, Richard Wrangham is concerned with what makes us human. In this book, he proposes a bold, original and thoroughly unorthodox argument. According to *Catching fire*, the vital step in our evolution from ape to human did not occur, as is usually assumed, when our ancestors mastered hunting or the use of tools, but was when they learnt how to cook, pioneering a path that eventually would lead to Jamie Oliver. As Wrangham stresses, what needs to be explained convincingly is an evolutionary moment of remarkable transformation. About 1.9 million years ago, when *Homo habilis* became *Homo erectus*, we first stood up straight, our mouths shrank, our guts condensed in capacity and our brains swelled in size. The best explanation for this development lies in the discovery of cooking. That, of course, was linked directly to the concurrent appearance of what Wrangham calls the 'muse of fire', to which humans 'became evolutionarily wedded'.

Wrangham marshals a considerable range of evidence of various kinds in support of his novel thesis, some of which is basic physiological observation. For example, why do humans have tiny mouths and small teeth? Because they are advanced culinary primates, designed to wolf down food softened by the heat of fire. Other perspectives rest on relevant scholarship. The author's review of a large body of anthropological literature confirms that no society, ancient or modern, nomadic or settled, has ever been able to survive for more than a couple of seasons on an exclusively raw diet.

An uncooked diet, raw meat included, may be palatable to Germany's large number of 'raw foodists' and other northern European cranks. It can also help the obese to slim. But the price is heavy. Studies of people who live on raw food alone, show that it supplies insufficient energy to the body, which often results in emaciation. Indeed, at least half of Europe's obsessive female 'raw-foodists' are so skinny that they are unable to menstruate, which is rather bad news for evolution. Wrangham's book fizzes with findings and observations of similar medical reasoning and other examples of interest. For example, in one British zoo-based experiment, a sample of high blood pressure sufferers were put on a diet of raw cucumber, effectively eating like chimps. It did wonders for their blood pressure but, despite stuffing themselves, the human apes all ended-up resembling Kate Moss. The truth, Wrangham argues, is that humans 'are as adapted to cooked food as cows are to grass'. Even Charles Darwin failed to recognise that, overlooking the significance of heat and food.

Gathering his ingredients from an impressively eclectic range of fields, the author makes his case with a sense of assured authority, conveying serious scientific knowledge in plain, unadorned prose. In this respect, *Catching fire* is a model of accessibility. Often relying on simple, yet astute observation, Wrangham argues that cooking not only gelatinises starch and 'denatures' protein, it softens everything that is consumed, making it more easily digestible. Moreover, it widens greatly the variety of what is edible and improves the calorific value of food. The social consequences of this form the larger part of Wrangham's 'big idea' about evolution, that is, that the adsorption of cooking spared the human body a great deal of difficult biological work, in the form of having to cope with the lengthy and tedious demands of chewing and digesting raw food.

Unlike chimps – stuck with chewing for six to seven hours a day – or post-prandial pythons, who would be a lot less languid had their rats or rabbits been pureed or even braised, we acquired the liberation of time through cooking. For cooking did not just increase the calorie intake for early humans, it allowed for what our era of middle-class therapy likes to designate as quality time. In short, it enabled our ancestors to hunt more proficiently and to think better – both highly energy-intensive activities. With our intestines well rid of the heavy burdens of masticating and digesting, our ancient predecessors acquired a surplus of energy. Going straight to their heads, it was turned mostly to good use by bringing them down from the trees and keeping them there. Cooking went on to shape the fundamental attributes of their evolving society, from the gendered division of labour, to sensory emotions, to all manner of other things, including consciousness itself.

Like any other evolutionary hypothesis, *Catching fire* is about the tangled threads of cause and effect. Its argument certainly makes for an enthralling read. At the same time, as with any work that proposes a grand theory of the past, it is fatter on socio-biological speculation and thinner on direct proof. One comes away impressed by the thesis, yet with a sense of it being accompanied by some tenuous circumstantial evidence. While never boring, a number of the illustrations are a bit bizarre. These include one in which a New Guinea mating ritual, involving fancy hair and dried boiled sago paste, supposedly connects cooking with sexual desire.

Richard Wrangham excels at nudging his readers into taking an anthropological leap into the belief that we are the *Homo sapiens* primate because we are culinary, but, at times, this jump can be mystifyingly high. It is far easier to accept how much beefier even Arnold Schwarzenegger would have been back in his bodybuilding days, had he boiled his daily intake of dozens of eggs instead of gulping them raw. And this, perhaps, pops one of the final questions raised by this clever, revealing and enjoyable book. How would Tarzan the ape-man have had his eggs at breakfast?