



What's for dinner?

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Meat consumption is subject of interest from environmental, economic, human and animal perspectives. Our current global population of over 7 billion people demands more resources as it grows. Therefore, one of the main challenges in today's society is to keep up with the rate of growth of the population and provide enough food, water and shelter for humanity.

Animal based proteins (especially meat) are highly consumed by people in developing and developed countries. In the western food culture meat represents the food with the highest position in the hierarchy of foods. It is recognised as the most highly prized food (Twigg, 1984). The dominant position of meat in Western cuisine becomes evident once you compare food intakes between Europe and Asia for example. For the latter, grains and vegetables are the main components in consumer's diets and a small amount of meat products have been consumed traditionally (Ki-chang, *et al.*, 2010).

Nowadays people in the regions of Southeast Asia, Latin America and Sub-Saharan Africa consume one third of the meat and one-quarter of the milk products per capita compared to Northern Europe and North America. However in the past few decades the rate of growth of meat consumption has doubled compared to developed regions (Delgado, 2003). Together with the rapid economic growth in Asia and the expansion of western culture, promoted as a new and better lifestyle; the proportion of meat

consumption will keep on rising (Ki-chang, *et al.*, 2010). In fact the world's meat consumption has more than

quadrupled in the past century, it increased from 47 million tons in 1950 to 260 million tons in 2005 and the trend is not showing a stabilising path yet (Sanbonmatsu, 2010).

In Latin America beef consumption is strongly linked to culture. Beef represents the main source of protein for the people in the region and cattle represent an important sector in agriculture. Uruguay and Argentina are the South American countries with the biggest consumption of meat per person annually with 78kg and 67kg respectively. These countries are also major producers of beef, exporting to several countries in the world (Guarín, 2008). Since the sixteenth century cattle has played an important role in Colombian agriculture (Etter, *et al.*, 2008). Nowadays the cattle industry offers the highest number of jobs in the country and beef is the most consumed product in the Colombian food industry. The average consumption of meat per person annually is 17 kg. In South American countries meat is served for lunch, for dinner, for special occasions and is even part of some traditional breakfasts

Meat consumption patterns vary significantly among countries. In a study conducted by SIFO (National Institute for Consumer Research in Norway) (Methi, *et al.*, 2002) that assessed meat consumption in six European countries, difference in consumption was due to the amount of cooked meals per day. In Portugal or Italy where people eat two cooked meals per day, meat consumption was higher than countries like Norway where people only eat one cooked meal per day. On the other hand they found that meat is related to social events, meaning that people tended to eat meat in family gatherings or reunions with friends. In countries where it is an

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important tradition to have those gatherings, like in Italy, more meat was consumed. Evidently meat and its consumption patterns are factors associated with the culture of ethnic groups or nations (Ki-chang, *et al.*, 2010).

Livestock and environment

The consequences of these increasing consumption trends affect several aspects that need to be introduced. The livestock sector puts stress on ecosystems and the planet as a whole (FAO, 2006). Beef production results in a large amount of methane, which is a significant contributor to greenhouse gas emissions. According to Pete Hodgson, the New Zealand minister for energy, science and fisheries, a dairy cow produces about 75 kilograms of methane a year, equivalent to over 1.5 [metric] tonnes of carbon dioxide (World Watch Institute, 2004). Consuming 1kg of beef has a similar impact on the environment as 6.2 gallons of gasoline, or driving 160 miles on a highway in an average American mid-size car (Fiala, 2006). Furthermore, water security as a priority for humankind in the 21st century is threatened by meat production (Nardone, *et al.*, 2010). A report from the International Water Management Institute noted that it takes 550 litres of water to produce enough flour for one loaf of bread in developing countries, but up to 7,000 litres of water to produce 100 grams of beef. Also energy consumed during meat production leads to accelerated rates of global warming; "It takes, on average, 28 calories of fossil fuel energy to produce 1 calorie of meat protein for human consumption, whereas

it takes only 3.3 calories of fossil fuel energy to produce 1 calorie of protein from grain for human consumption" (World Watch Institute, 2004). Finally, meat production endangers biodiversity, in Latin America there is a rapid expansion of pastures into some of the most vulnerable ecosystems, with 0.3 to 0.4 percent of forest lost to pastures annually. Cattle are now the main reason for deforestation in the Amazon (FAO, 2006).

If we want to keep up with the current scale and intensity of meat consumption, we will need to agree between the countries and suffer together the consequences of climate change. It will affect local and global agriculture; soil infertility and water scarcity amongst other problems. Evidently calls to lower meat consumption levels are crucial to ensure sustainable development. Despite studies showing that a global transition to a low-meat diet could reduce the impacts on climate change by as much as 50% in 2050 (Stehfest, *et al.*, 2009), this problem remain complex. As shown above, meat consumption represents more than just a problem for the environment. It is part of a cultural complex that is intertwined between local and global perspectives. The need to reduce consumption is clear, but as it is an important part of some traditions is it fair to ask certain countries to stop eating meat? Or even worse, how do we try to take away meat from that pedestal that links its consumption with social status and a model lifestyle? How can we change the trend? Well, in 2003 the US started the Meat Free Monday campaign as a simple idea to show everyone the value of eating less meat by

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having one meat-free day each week. It seeks to reduce the environmental problems associated with the meat industry and diminish meat consumption overall (Meat Free Monday, 2012). Ideas like this

one will not compromise our culture or religion and they can make a world of difference, how about we implement one meat-free day per week in our lives to start the change? 🍃

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