THE ENERGY WE ARE EATING

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→| ALTERNATIVES

"If we want things to stay as they are, things will have to change."

GIUSEPPE DI LAMPEDUSA

WHEN I EXPLAIN TO MY omnivore friends that the cattle's farts can damage the ozone layer more than the vehicle traffic, and that the main scope of the oil wars is to feed our stomach before filling our tanks, they think I am getting crazy and stare at me with astonishment and disbelief. I really can't blame them.

That diffidence has indeed encouraged my study, from a scientific point of view, of the energetic and the environmental impacts of the consumption of animal proteins. After a deep study of the scientific literature, I find crazy those people who struggle to minimize their ecological imprint with small actions only – short showers, flow-splitting taps, high-efficiency lamps – and forget the most simple and effective solution to save water, oil and land: reducing the intake of meat and animal proteins in general.

Scientific documents show clear evidence (TABLE 1): by replacing 1 kg of ovine meat with the equivalent 1 kg of soya, it is possible to save as many as 49 thousand liters of fresh water, more than the amount we individually consume for bath and showers in one year. To make up one food calorie of beef meat, it is necessary to burn 40 calories of fossil fuels. While a hectare of land used for the farming of bovine meat can feed one person only, the same hectare would feed more than 20 people, if converted to the production of potatoes. Moreover, as the FAO Report "Livestock's long shadow environmental issues and options" demonstrated in 2006, the methane expelled by livestock in intensive farming is far more dangerous, in terms of greenhouse effects, than the exhaustion gases emitted by the global vehicles fleet worldwide.

Despite being publicly known, these data are commonly ignored and kept out of the flashlights. The limitation of meat consumption is never mentioned as an effective tool for the reduction of our ecological imprint. Why?

The reasons are related to a series of concurrent factors.

Animalists and vegetarians tend to have a radical approach towards their choices, which are then perceived as "difficult" even by those sensible people who would be willing to lower their consumption of animal ingredients, even if not eliminating them from their diet. Furthermore, strong economic interests are connected to the meat industry, encouraging our ministries, for example, to eat meat in public by any minimal sign of consumers' hesitation. Besides, a large disinformation campaign anachronistically describes vegetarianism as an unsustainable and unhealthy option; on the contrary, it is demonstrated, with the highest medical-scientific reliability, that a lacto-ovo-vegetarian diet is perfectly compatible with an healthy alimentation, and that the risks of cardiovascular diseases, in comparison with an omnivore diet, are strongly reduced.

In such a context, people hardly realize how much land, water and energy could be potentially "liberated" by means of a simple improvement of their diet habits.

Science indicates that peace is built also at the table, starting from the food choices, and that we

can contribute everyday to rebalance the exploding needs of the mankind with the possibilities of our Earth, which could give to everybody all what is necessary for a sober life.

There is no need to embrace a particular "food religion", but to learn how eating "with our brain" before using our mouth and stomach. We will discover that animal proteins are neither indispensable for a balanced alimentation nor for the pleasure of the taste, and that their production requires an enormous amount of resources which could be more usefully employed. That concept is indeed at everyone's reach.

We may therefore follow a more balanced diet standard in order to reduce our ecological imprint at the minimum. What we need is only a deeper awareness and a broader view over our interconnections with the world, to get the link between the move of the butterfly in our garden and the hurricane in the other part of the world. Small actions in our daily life may have big consequences on the whole planet.

A diet able to conjugate vegetarianism and a responsible use of resources leads to a different vision of the world, free from violence and cholesterol, the latter being even potentially dangerous for our body, as well known by those invited to suspend meat intake for medical reasons.

The excessive consumption of animal proteins in our society jeopardizes the food sovereignty and the survival of populations living on other countries far away.

Water, cereal, prime materials and oil consumed just for our tables are both limited and exhaustible resources. The basic idea of an energetically and ecologically sustainable approach to the alimentation requires just some respect for our mother Earth. By reducing the meat consumption we can achieve a better and tastier eating, and restore the hope to populations who have turned poor due to our greed and unaware lifestyle.

Our willingness to understand the world and to search what is better for us will become an active instrument of peace and justice for all.

TABLE 1 – MEAT CONSUMES MUCH MORE WATER

TO PRODUCE 1 KG OF ...	... THE NEEDED AMOUNT OF WATER IS
Millet	272 liters
Potatoes	630 liters
Corn	650 liters
Grain	900 liters
Rice	1,600 liters
Soya	2,000 liters
Chicken	3,500 liters
Pork	6,000 liters
Beef	43,000 liters
Ovine	51,000 liters

SOURCE: David Pimentel et al., "Water Resources: Agricultural and Environmental Issues" [Food production vs. water consumption] - http://dspace.library.cornell.edu/bitstream/1813/352/1/pimentel_report_04-1.pdf .

TABLE 2 – MEAT CONSUMES CEREALS

TO PRODUCE 1 KG OF...	... THE NEEDED AMOUNT OF CEREALS IS ...	... THE NEEDED AMOUNT OF FORAGE IS...
Milk	0.7 kg	1 kg
Chicken	2.3 kg	--
Turkey	3.8 kg	--
Pork	5,9 kg	--
Eggs	11 kg	--
Beef	13 kg	30 kg
Lamb	21 kg	30 kg

SOURCE: David e Marcia Pimentel, "Sustainability of meat-based and plant-based diets and the environment" [Amount of cereal needed to the production of animal food] - http://www.ajcn.org/cgi/content/abstract/78/3/660S.

TABLE 3 – MEAT OCCUPIES LAND

1 HECTARE OF LAND EMPLOYED TO PRODUCE...	... CAN FEED FOR ONE YEAR
Cabbage	23 people
Potatoes	22 people
Rice	19 people
Grain	15 people
Beans	9 people
Peas	9 people
Pork	3 people
Lamb	2 people
Chicken	2 people
Beef	1 person

SOURCE: Colin Spedding, "The effect of dietary changes on agriculture" [Efficiency of land by different uses].

TABLE 1 – MEAT CONSUMES OIL

TO PRODUCE 1 CALORIE OF...	... THE NEEDED AMOUNT OF FOSSIL ENERGY IS
Turkey	10 calories
Pork	14 calories
Beef	40 calories
Lamb	57 calories

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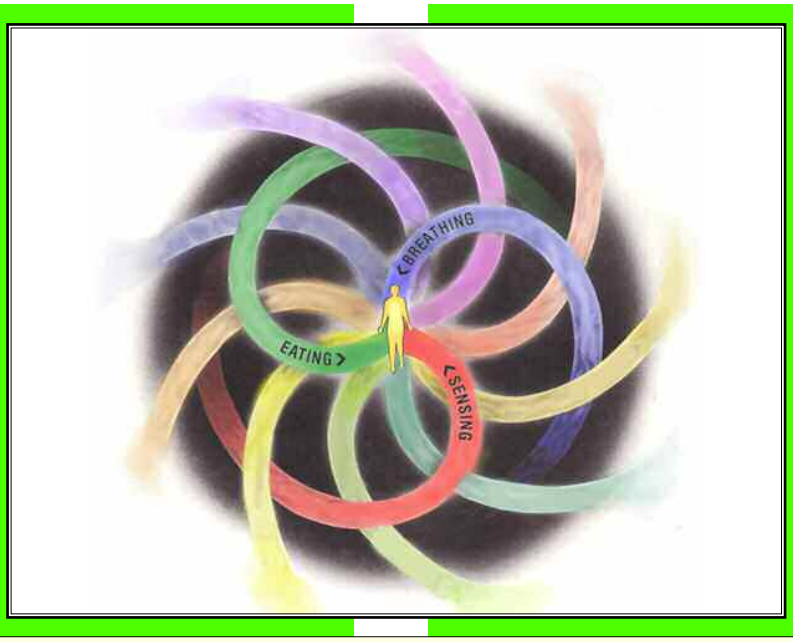

DECALOGUE FOR EATING PROPERLY WITHOUT BURDENING THE WORLD

1 ~ Eat seasonal fruit and vegetables, locally produced: it required less energy to reach your table.

2 ~ Be aware that all proteins you need can be provided by vegetal food, with an environmental and social impact much lower with respect to the animal proteins.

3 ~ Independently from the specific diet, ingredients like soja, seitan and tofu can perfectly replace the meat and give to your alimentation a higher variety and a lower ecological imprint.

4 ~ To avoid contributing to the environmental damages related to the intensive farming, use eggs produced in biological farms only, where huns live outdoors and not in cages, fed by biological food. In Europe there is a numeric code pressed on each egg. The last digit of biological egg is "0" (zero).

5 ~ Balance your diet with at least 20% of raw food, such as fruit, salads, vegetables, ready to be consumed without any energy for the cooking.

6 ~ Cultivate at home or on your terrace what you can produce autonomously, like parsley, basil, small onions.

7 ~ For imported products like spices, tea, coffee and cocoa, use preferably the circuits of the fair trade.

8 ~ Use the tap water for your daily drinking. In 99% of the cases it is good enough to drink or can be easily depurated.

9 ~ Avoid products packaged in plastics. In contrast with supermarkets, open markets in your neighborhood allow you to use recyclable paper bags.

10 ~ As a general rule, avoid eating or consuming beyond your real needs.