

World Water Day

**15,500 litres of water per 1 kg of meat? Italy uses 25% less, of which only 1,495 litres are really consumed**

- *Respect to the world average of 15,415 litres of water per 1 kg of beef, **Italy uses 11,500 litres of water, of which 87% is "green water"**, i.e. water from renewable sources.*
- *The weekly amount of beef recommended by nutritionists in the Mediterranean diet (2 portions of 70-100 g.), necessitates an effective consumption of about **300 litres per week**.*
- *In general, in the bovine, pork and poultry sector **only 10-20% of the water used in production is actually "consumed"**.*

Rome, March 19, 2016 - Being below the average can also be an advantage: meat production in Italy is in fact among the most virtuous, presenting a water consumption which is below the international average. On the occasion of World Water Day **Sustainable Meat**, an initiative of the main associations of the three Italian meat chains - Assocarni, Assica, Unaitalia - evidenced **data on the water footprint of meat production in Italy**, to punctually illustrate the environmental impacts of the sector, starting from beef production.

*"With regards to the environmental impacts of livestock production some clarification is appropriate because often one reads misleading data that can confuse the consumer" - said **Ettore Capri, Director of the Research Centre for Sustainable Development (Opera - UCSC)**. – "The amount of water employed in the production of meat, which also includes the data relating to the agricultural crops made to produce animal feed, is in fact constituted for the most part by 'green water' (i.e. rainwater), a renewable source and amongst the most sustainable. The water effectively consumed to produce meat ("grey" and "blue" water) is therefore reduced to considerably smaller amounts than the overall figure. Furthermore, the use of advanced technology in water management (e.g. recovery and purification) and a correct use during agricultural production, contributes to make them more sustainable".*

The *water footprint* of the Italian beef production amounted to **11,500<sup>1</sup> litres** of water to produce **1 kg** of meat (**25% less** than the 15,415 litre world average), and **only 13% (1,495 litres) of this it is really "consumed"**. The remaining **87%, is therefore constituted of "green water"**, in other words rainwater used in the cultivation of raw materials for animal feed.

Considering the amount of beef recommended in a balanced diet<sup>2</sup> (2 portions of 70 to 100 g per week), it emerges that eating **meat in the right amount** does not involve a significant

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<sup>1</sup> Mekonnen, M.M., Hoekstra, A.Y. The Green, Blue and Grey Water Footprint of Farm Animals and Animal Products. Value of Water Research Report Series no.48, UNESCO-IHE, Delft, the Netherlands, 2010

<sup>2</sup> Source CRA-NUT (now CREA)

increase of the environmental impact, with a real consumption of about **300 litres of water per week**.

The reasons for a lower volume of water being used in Italian production are to be found in the national livestock system which, being based on the combination of extensive and intensive farms, permits the achievement of **a good efficiency** in terms of resources used per kg of meat produced. Moreover it can be observed how Italian beef production occurs predominantly in the best areas with a **greater availability of water** (for example along the Po River and its tributaries).

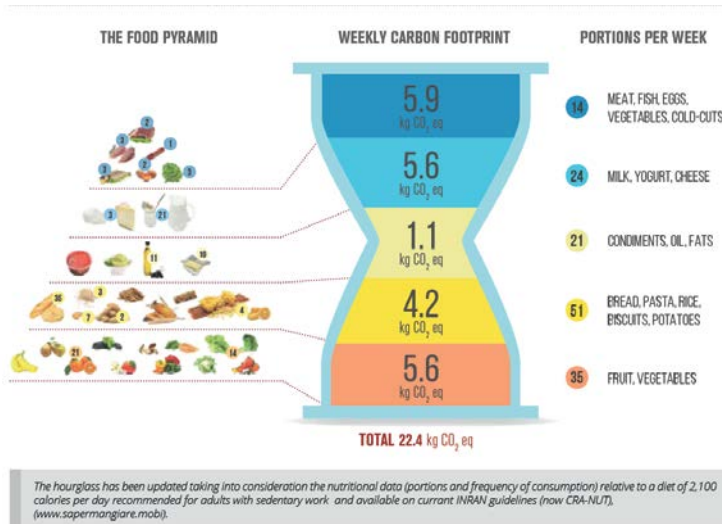
The **water footprint**<sup>3</sup> is the sum of three contributions that are partly real and partly virtual: evapotranspirational water used by plants to live (**green water**), water effectively used by production processes or to irrigate the fields (**blue water**) and the water potentially needed to dilute and purify waste water (**grey water**). For agricultural food products, the "**green water**" component is by far the most significant of the three, **constituting almost the totality of the impact**.

On the whole, the entire meat sector (bovine, poultry and pork) uses **80-90% of the water resources part of the natural water cycle**, which are reinstated to the environment as rainwater; **only 10-20%** of the water needed to produce 1 kg of meat is really consumed.

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<sup>3</sup> As determined by the reporting protocol developed by the Water Footprint Network - [www.waterfootprint.org](http://www.waterfootprint.org)

## The Environmental Hourglass



A moderate consumption of meat not only benefits the body, but is also **sustainable for the environment** as shown by the Environmental Hourglass, which graphically represents the environmental impact of food consumption for a week: the multiplication of the impacts of individual foods by the weekly amount suggested by nutritionists, for example through the food pyramid proposed by CRA-NUT (now CREA), evidences how eating **meat in the right quantities does not lead to a significant increase in the environmental impact.**

**The Environmental Hourglass** is the centrepiece of the **Sustainable Meat** project promoted by the three associations which represent all the Italian industrial meat chains (bovine, pork, poultry) whose objective is to debate across-the-board all matters related to the world of meat: an unprecedented project in Italy, which with an educational and informative approach, aims to contribute towards a balanced communication on health, nutrition and sustainability. [www.carnisostenibili.it](http://www.carnisostenibili.it) – [www.thesustainablemeat.com](http://www.thesustainablemeat.com)

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