GRANDPARENTS ARE GREAT!

ANIMAL PROTEINS ARE A VALID ALLY FOR KEEPING IN SHAPE AND ACTIVE AS WE GROW OLDER

- ***Grandparents arrived on this planet during a precise phase of prehistoric development, namely when people started eating meat.***
- ***Meat consumption in Italy spread after World War 2, and the Italians made a "forward surge" as they conquered the record on longevity.***

Rome, 2 October 2018 – Today is **Grandparents' Day**, and in the same way as every year **the main pillars of each family will be celebrated**. Grandparents are **source of good advice and sagacity**, but they are also a **fundamental economic support**, representing a solid help with **caring for** and educating **children**.

Grandparents are a relatively recent presence on our planet. **But why do grandparents exist?** Certainly also thanks to the omnivorous diet. Science, in fact, demonstrates that **the introduction of meat in prehistory led to the succession of different generations**, therefore the first grandparents existed in a precise phase of human evolution.

Continually longer-living and more youthful, grandparents are taken for granted, but this was not always the case. They appeared, in fact, only when human beings managed to live longer and see their children's children being born and growing up. This giant step forward towards longevity was made possible, already in prehistory, thanks to our most distant meat-eating ancestors: the ***Homininins***, a term that recently overtook ***hominids*** to include all the extinct species similar to *Homo*. From a species that fed almost exclusively on leaves and unripe berries, the ***Homininins*** evolved into omnivorous beings, which led to us be as we are today: **longer-living and more intelligent than other species**.

When compared to body weight, the cerebral mass of a human being is about double that of other mammals. This means a large brain that is always starving and which, even though equalling 2% of our body weight, consumes around 20% of the energy used daily by an adult (up to 70% in babies). To do this, it must feed on food that is easy to digest and which has a higher biological value than leaves and unripe fruit. Given that the development of the intestinal mass is inversely proportional to the quality of the food eaten, the reduction in the size of our intestines in favour of the development of our cerebral mass was only possible thanks to an overall improvement in diet quality, caused by the introduction of food with a high concentration of nutrients, like meat.

"*The result of our evolutionary adaptation to the consumption of meat was not only cerebral and physical development, but also an extraordinary increase in the longevity of the human species in comparison with that of chimps,*" highlights **Giuseppe Pulina, professor of Special Zootechnics at the University of Sassari and President of the Carni Sostenibili Association***: "Our longevity is the result of the adaptation of the human genotype to a diet with meat: the involved genes, in fact, are those that resist inflammation and parasites, but which also codify longevity, as shown by the survival and mortality curves of man and chimps."**

In the past decades, above all after World War II, **the presence of meat in Italian diets** contributed to increasing life expectancy, making **Italy the second longest-living country in the world** and allowing grandparents to cover a fundamental role in the social fabric and in reference families. Not only related to looking after small children, given that Italians seem to prefer grandparents (generally free of charge) to baby-sitters, but also to eating habits. And who doesn't enjoy having a meal with their grandparents?

"*Grandchildren prefer the food that their grandma cooks because pregnant women certainly ate their mother's food and transmitted it to their child through epigenetics,*" **explains professor Pulina**. *"As a result, grandparents are responsible for the good diet of mothers and grandchildren, which, as already said, prefer the food their grandmothers make, because plenty of grandchildren are looked after by their grandparents".*

In order to remain in shape and active, even our grandparents need allies, which they can find, for example, in a **balanced diet and some physical activity**. These good habits are useful above all for combatting the

physiological process (*sarcopenia*) that determines a loss of muscle mass, strength, and as such the ability to carry out many of our daily activities. Animal proteins are among the most suitable for contrasting the reduction of muscular power, in addition to cardiovascular illnesses, osteoporosis, type 2 diabetes and obesity.

In addition, if you add physical activity to a balanced diet that has the right amount of proteins, our grandparents can increase their muscle power, which will help them face their daily commitments. What's more, as recently demonstrated by the **Prospective Urban Rural Epidemiology (PURE) study** that followed 140,000 subjects aged between 35 and 70, greater muscle power can be associated with longer life expectancy.

Adding meat to a balanced diet, in short, is a way to ensure the presence and balance of energy, mineral proteins and vitamins. After 70, the body **no longer** absorbs many vitamins and minerals easily. This is why red meat is very useful for satisfying its **vitamin B12, iron and zinc** requirements, the latter being fundamental for **tissue repair**. Our grandparents' memories are also a link with the past, and meat helps defend this ocean of knowledge because it helps contrast the appearance of cognitive decline, thanks to its contribution of **vitamin B12, selenium, folate, choline and omega 3**.

"When we become adults our muscle mass decreases at a rhythm that accelerates when we pass 50. Muscles represent around 45% of our body weight when we are between 20 and 30, and lowers to only 27% at 70. This tendency accentuates if we do not assume sufficient quantities of protein with a high biological value, such as animal protein," says **Dr. Elisabetta Bernardi**, **a nutritionist and biologist from the University of Bari**. "*For older people, a slightly higher quantity of proteins than that for adults can be useful, because it increases their reserves and, in addition to contrasting the progressive loss of muscle mass, also prevents skin fragility and reduces the immune function, which leads to better recovery from illnesses*."

**Survival and mortality curves of humans and chimps (Finch, 2010).*

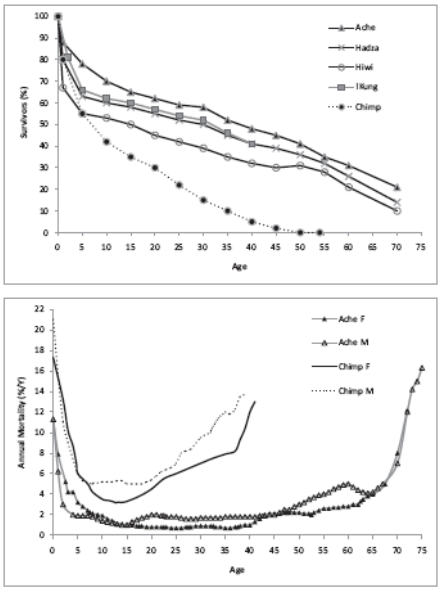

Fig. 1. Demographic comparisons of wild chimpanzees with human populations living under poor hygiene and with little access to medicine. [Reproduced with permission from ref. 6 (Copyright 2000, John Wiley & Sons).] (*A*) Survival curves. (*B*) Age-specific mortality. At all ages after infancy, chimpanzees have higher mortality than the Ache and show acceleration of mortality at least 20 years earlier.

Carni Sostenibili *is the project promoted by three category associations - Assocarni, Assica and Unaitalia that represent all the meat supply chains in Italy (beef, pork and poultry). Its objective is to discuss all the matters related to the world of meat in a transversal manner: an unprecedented project in Italy which, by using a training approach, will contribute to balanced information on health, nutrition and sustainability.*
www.carnisostenibili.it

CONTACTS : Burson Marsteller – Press Office Delia Ciccarelli – delia.ciccarelli@bm.com – 02.72143539 Giulia Da Col – giulia.dacol.ce@bm.com – 02.72143521