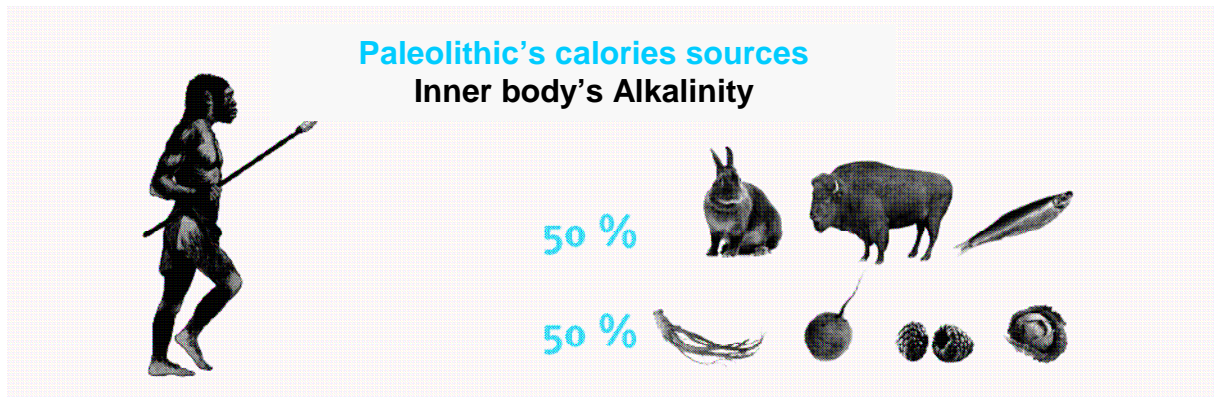
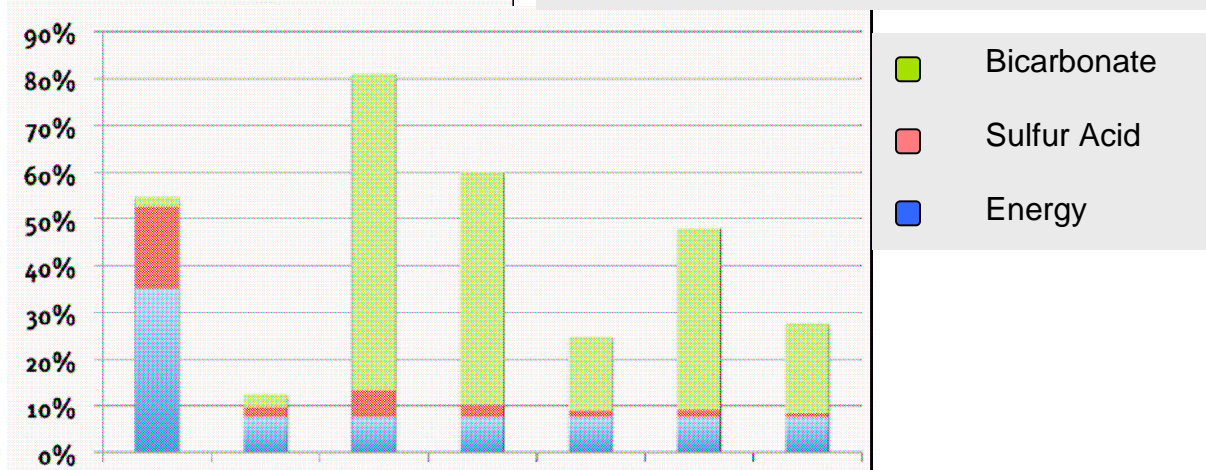
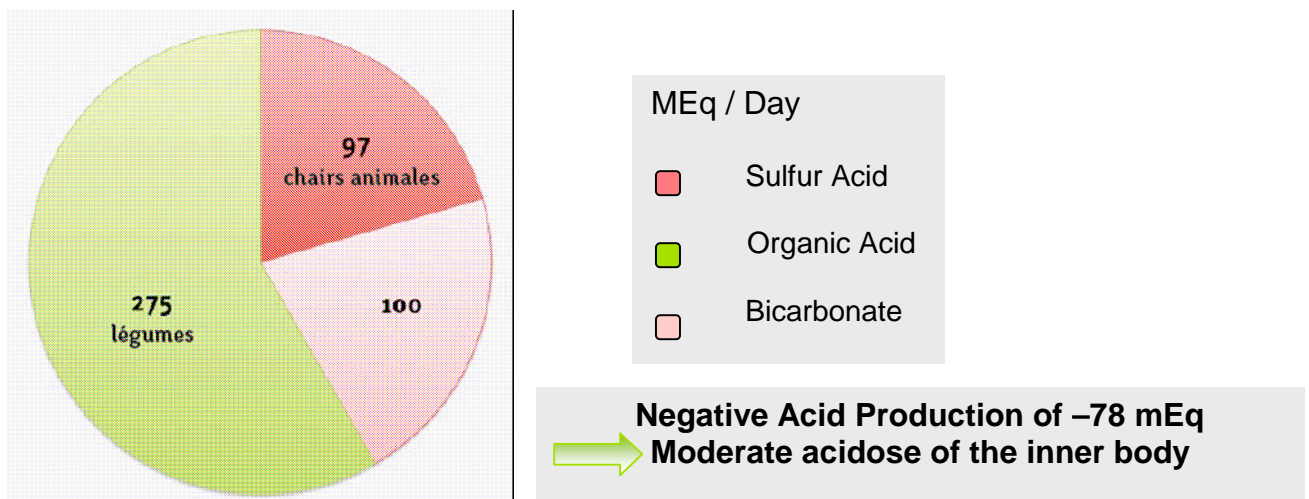


A.M.L.N & Evolution


Less than 1% of the human species' evolution could not adapt our metabolism, generated over million years, to the disruption caused by the introduction of agriculture, farming and food technologies of the last century.







The daily calory amount of our paleolithic ancestors was constituted by up to 50% of wild meats, generating acids that were compensated by a high amount of vegetables, tuber, roots and fruits producing bicarbonate and leading to an **alkalinity of the inner body**.





Today's alimentation Inner body Acidité







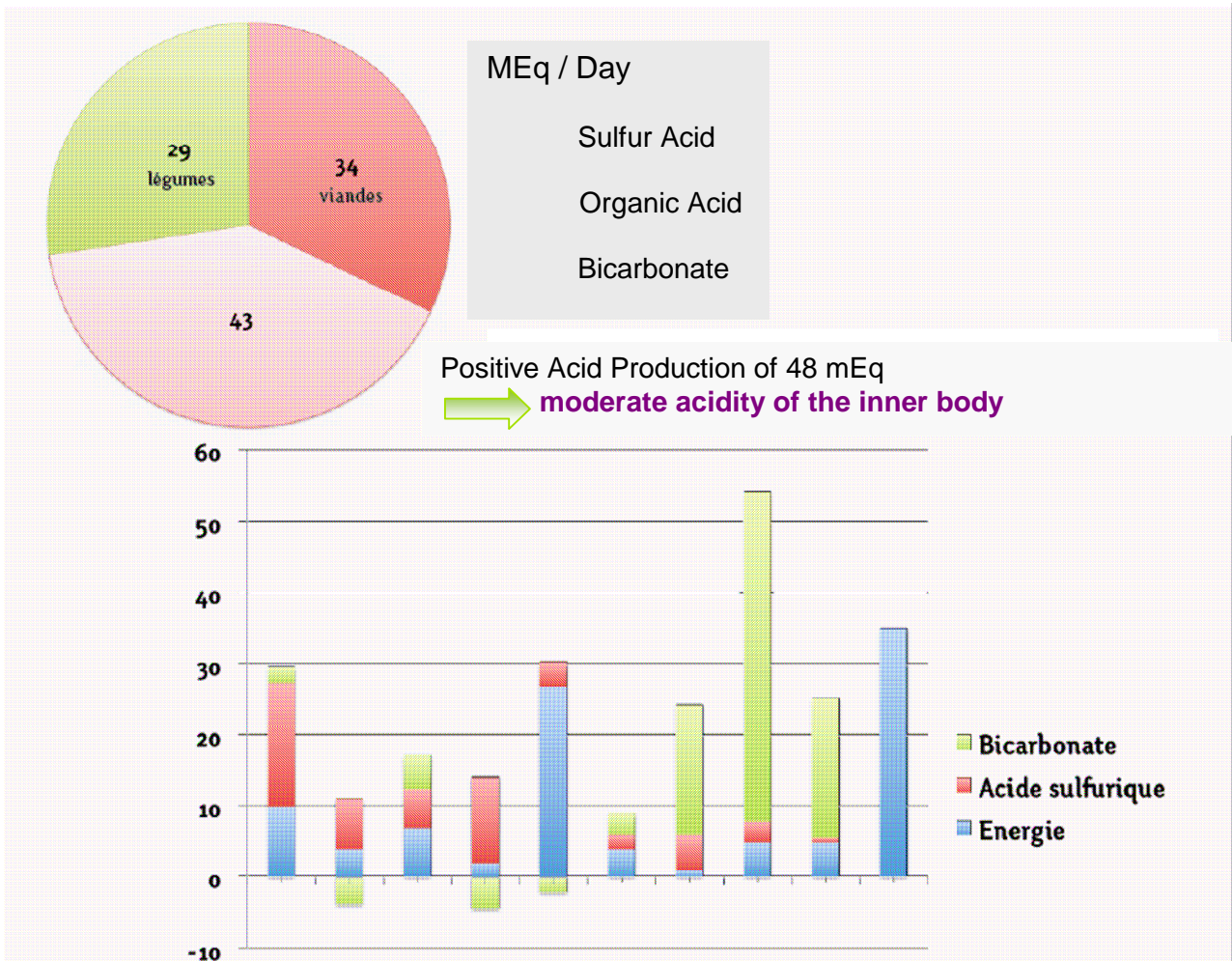


Less vegetables

More acidity

AMLN

By introducing cereals, dairy products, and industrial food in today's alimentation, we have reduced the part of vegetables, leading to a net acidity and a slight increase of acidity of our inner body, creating **Nutritional Latent Metabolic Acidity**.



Phosphoric Acid

Phospho-proteins' Oxydation

Sulfuric Acid

Sulur amino-Acids, Methionin & Cystein's Oxydation

Proteins



Alkaline Salt

Alkaline Bicarbonate

3 organs play an essential part in this physiologic process

Liver
& active tissues of the metabolism



Oxydation

Intestins




Modulate the acidity level

Kidney



Urinary discharge

H⁺ Ions  NH₄⁺ Ammonium Ions

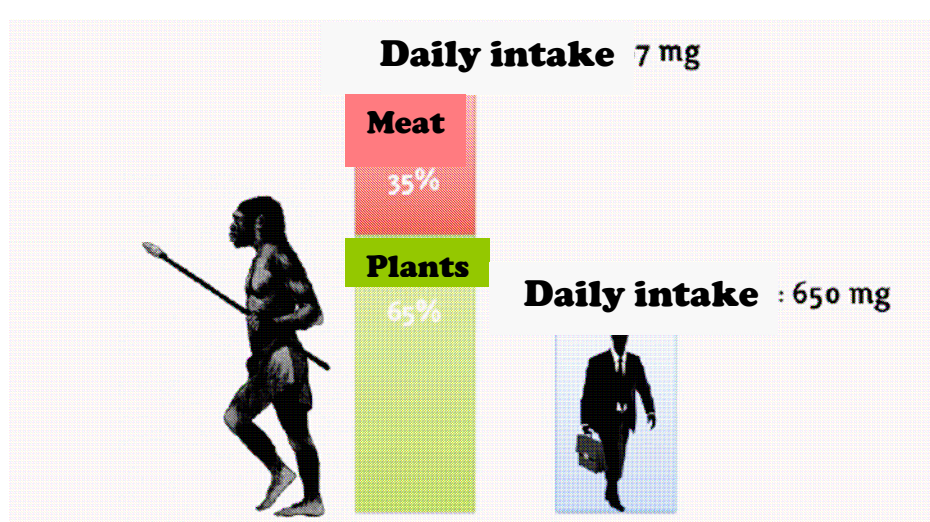
Calcium & Evolution

The human species & its primate ancestors have evolved through million years in an environment rich in calcium. 150 million years ago, our ancestors used to eat insects, whose body chitin is very rich in calcium.

Number of hominids were insectivores and had the capacity to digest and absorb the calcium contained in the insects' chitin.

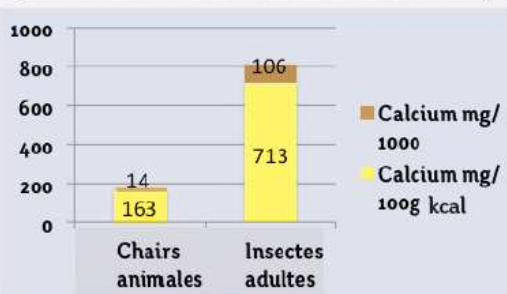
Primates' calcium intake was twice ours.

Based on an average of 300kcal intake per day, spread between meats (35%) and plants (65%), our ancestors' calcium intake reached 1967mg, which is more than twice our average intake of 500 to 800 mg/day.

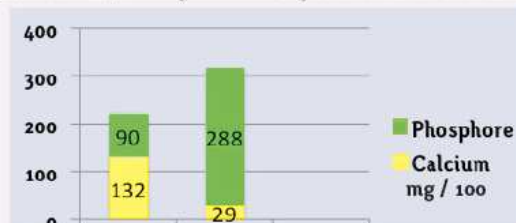


Apport quotidien en calcium

Calcium dans insectes et chairs animales



Calcium & Phosphore des plantes aux céréales

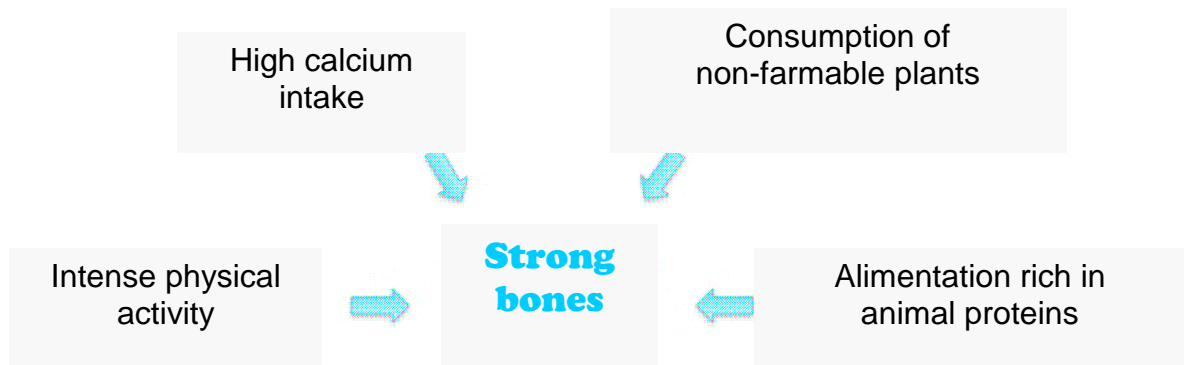


- Plants have a high calcium content (133mg/100g)
- Furthermore, this "paleolithic calcium" contains more phytates & phosphates than cereal (Ratio Ca/P = 1 for the calcium and 0.1 for plants).

Une ossature plus solide

The analysis of bones from the paleolithic period show that our ancestors had :

- A superior bone mass
- A slower loss with age
- A thicker cortical (1.5 times thicker at similar age)
- A decrease of height from the rarification of the big games and the introduction de cereal (Height at Bronze Age was 15cm taller than the Homo-erectus)
- **Compared studies of bones found in the Middle East & North America million years appart the deleterous impact of the development of agriculture.**

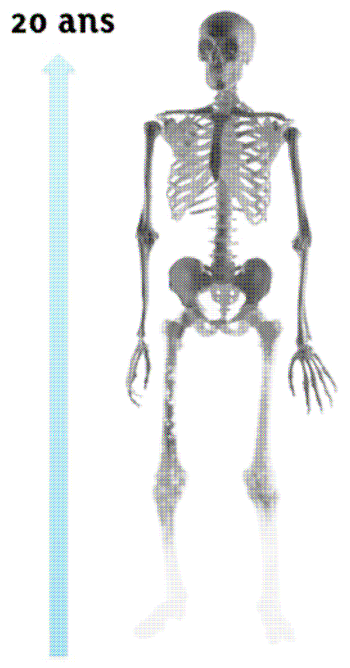


Our ancestors from Paleolithic combined 4 essential elements for strong bones.

AMLN & calcium

1/3 of the urinary loss of calcium is generated by the **NLMA (Nutritional Latent Metabolic Acidity)**.

1 mEq of Net Urinary Acidity (NUA) generates a loss of 40 nano-moles –1.6mg- of calcium. Which is to say for the average American citizen's daily acid production of 47 mEq/day, a calcium loss of 1.6 mmole \rightarrow = 66mg/day (approximately 30% of the average calcium production).



Analysed over 20 years, with no metabolic adaptation, this loss of calcium would reach 20gr/month and 480gr in 20 years, which is 20% of the calcium contained in the skeleton. This could be the cause of Osteoporosis!