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## Entomophagy or...Entomophoby?



In Italy, starting in January, first supermarkets are going to sell insects as food. While most Italians do not like the idea, in most countries of the world insects are already a part of the daily diet.

In order to find out more about Entomophagy, we did some researches:

| Insect                   | Protein<br>(g) | Fat<br>(g) | Carbohydrate<br>(g) | Calcium<br>(mg) | Iron<br>(mg) |
|--------------------------|----------------|------------|---------------------|-----------------|--------------|
| Cricket                  | 12.9           | 5.5        | 5.1                 | 75.8            | 9.5          |
| Dung<br>Beetle           | 17.2           | 4.3        | .2                  | 30.9            | 7.7          |
| Giant<br>Water<br>Beetle | 19.8           | 8.3        | 2.1                 | 43.5            | 13.6         |
| June<br>Beetle           | 13.4           | 1.4        | 2.9                 | 22.6            | 6.0          |
| Red<br>Ant               | 13.9           | 3.5        | 2.9                 | 47.8            | 5.7          |
| Silk<br>Worm<br>Pupae    | 9.6            | 5.6        | 2.3                 | 41.7            | 1.8          |
| Termite                  | 14.2           | N/A        | N/A                 | N/A             | 35.5         |
| Weevil                   | 6.7            | N/A        | N/A                 | N/A             | 13.1         |

In the graph we can see that the amount of nutrients varies according to the different species.

We confronted these with the nutritional values in meat and we found out that both have a similar amount of proteins. For example, pork meat has 16.9 g/ 100g, which is more or less the same amount found in insects.

Insects contain as much fat as the lowest fat containing meat, chicken, which has 5,6 g /100g fats. They also contain vitamins such as A, D, E and K.

We established that insect are a valuable alternative to meat as far as nutrients are concerned, but let's say they aren't exactly appetizing!

Why should we eat them then?

Well, it turns out that they are ecologically more substainable than meat.

Livestock accounts for 14,6% of Greenhousegases (GHG) total yearly production, producing one billion tons of CO2. Insects would produce a negligible amount of it. To produce 1Kg of meat you need 12.6Kg of animal feed that's why 60% of agricultural lands are tapped to produce animal feed.

Using the same amount of feed for insects you obtain 8.6 kg of eadible insects parts.

Animals also need large amounts of water. To produce 1Kg of meat you need 12 liters of water.

That's why, if you are a vegetarian because you are concerned about meat footprint, insects are a great source of proteins.

Also, accounting for the growing population, insects are likely to be the food of the future.

As mentioned before, most of the world already eats insects: we searched the Internet to find out how they are eaten around the world and the most popular recipes.

They are generally eaten boiled, fried or cooked on a spit.

Crickets are said to have a nutty flavour, while most worms have an almond-mushroomy flavour.



Do you like this cake?

If you do, you should know that it's made out of insect flour.

You still think that you will never eat insects?

You are wrong, you have actually already eaten them! Italian laws allow parts of insects to be contained in food.

For example, chocolate contains in average 20 parts of insects in one bar!

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