

### **Prize Winner**

# **Science Writing**

## Year 3-4

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#### Future Foods: Eating Insects – Yuck or Yum?

Protein is an important nutrient that our bodies need to grow and stay healthy. It helps us build and repair our muscles, bones, and organs, and it also plays a role in our immune system and helps us feel full after eating.

There are many sources of protein that we can get from our food, including meat, fish, poultry, eggs, dairy products, beans, nuts, and seeds. Different types of protein have different benefits and it's important to eat different protein sources to make sure we're getting all the nutrients we need.

For example, animal proteins like meat and dairy products are good sources of complete protein, which means they contain all the essential amino acids that our bodies need. Aminoacids are the building blocks of proteins. Plant-based proteins like beans and nuts are also good sources of protein, but they may not contain some essential amino acids. That's why it's important to eat a variety of different plant-based proteins to make sure we're getting all the amino acids we need.

Entomophagy is the practice of consuming insects as a food source. Over the past few years it has been gaining popularity in recent years as a sustainable and environmentally-friendly alternative to traditional protein sources. Insects are highly nutritious, efficient to produce, and require fewer resources than livestock, making them an attractive option for feeding the world's growing population while minimising the impact on the environment.

One of the main benefits of entomophagy is its sustainability. Insects are incredibly efficient at converting their own food into body mass. Some insects eat 12 times less "feed" per kilogram of meat than cattle. They also release less pollutant gas emissions and require less water than livestock like cows. For example, crickets require just 1% of the water needed to produce the same amount of protein as beef. By consuming insects as a protein source, we can significantly reduce our carbon footprint and preserve natural resources.

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Another advantage of entomophagy is its affordability. In many regions of the world, insects are readily available and inexpensive compared to other protein sources. They can also be easily farmed or harvested, requiring minimal space and infrastructure. This makes them an accessible option for people in low-income countries or those living in food-insecure areas.

Insects are also highly nutritious, containing essential vitamins and minerals such as iron, calcium, and zinc. They are also rich in protein and healthy fats, making them an excellent addition to a balanced diet. Additionally, insects are low in cholesterol and have a low glycemic index, making them a good choice for people with dietary restrictions or health concerns.

In terms of taste, insects have a unique and delicious flavour profile. They can be prepared in a variety of ways, including roasted, fried, or ground into flour for use in baked goods. They are also a versatile ingredient, lending themselves well to savory dishes, snacks, and even desserts.

Despite the numerous benefits of entomophagy, there are still cultural and societal barriers to overcome. In many Western countries, insects are seen as a novelty or a strange food choice, which can make it challenging to introduce them as a mainstream food source. However, as the environmental impact of traditional protein sources becomes more apparent, there is growing interest and acceptance of alternative protein sources such as insects.

Entomophagy offers a promising solution for feeding a growing global population while minimising the environmental impact of food production. It is a sustainable, affordable, and nutritious alternative to traditional protein sources that has the potential to play a significant role in the future of food. As we continue to explore innovative solutions to the challenges of feeding the world, entomophagy should be considered as a viable and important option.

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