

# Researcher Interview

Professor Takashi Hayakawa  
Faculty of Applied Biological  
Sciences, Gifu University



**Q1**

Recently, I've been hearing "6th nutrient" a lot, but could you tell me more about it?

**A1**

What people have started calling the "6th nutrient" is dietary fiber. While it's indigestible to humans, the bacteria in our guts use anaerobic fermentation to turn it into gaseous components (methane, carbon dioxide, and hydrogen) as well as useful chemicals, like short-chain fatty acids. Ingesting dietary fibers reportedly helps control the sharp increase in blood sugar after a meal, suppresses cholesterol intake, and improves the gut environment. Further, the antioxidant properties of hydrogen produced from dietary fiber fermentation has garnered a lot of attention.

**Q2**

Is there anything good we can do for our bodies after we've eaten too much greasy food?

**A2**

Well, it's better to avoid eating too much greasy food altogether. The free radicals produced by stress change fats into fatty acid peroxides, and this causes a chain reaction of oxidization throughout the body. So, it might be good for people who enjoy fatty foods to drink alkaline ionized water, which contains hydrogen that acts to prevent oxidization. After feeding rats food with high lipid content, we've found that drinking alkaline ionized water can control peroxide levels in the lipids found within their bodies.