Monkey or ape?

Monkeys, apes and humans belong to the same group of mammals (primates) characterized by binocular vision (forward-facing eyes), opposable digits, prehensile tails, and possession of nails instead of claws. Apes are however tail-less and bipedal (semi-erect). Monkeys are tailed and quadrupedal (walk on four legs).

References


From Farm to Mouth: Where Food Meets Science

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Introduction

Eating is one of the crucial things we do for our daily existence. We cannot survive starvation for a very long time. We will lose our ability to function if we do not eat. Before we get the substances (nutrients) in food that are required for our daily sustenance, there is a branch of science involved called Food science and technology.

Food science is the study of the production, processing, preparation, evaluation, and utilization of food (Institute of Food Technologists, 2011). Food technology, on the other hand, is the use of the information generated by food scientists in the selection, preservation, processing, packaging, and distribution, as it affects the consumption of safe, nutritious and wholesome food (Potter and Hotchkiss, 1986). This branch of science is a union among several other core or branches of science including: mathematics, engineering, biology, chemistry, physics and psychology.

Since ancient times, human beings have been concerned with the science of food, but it is not until recently that it has become a course in various senior high schools and a degree programme in tertiary institutions. People who major in Food Science and Technology from degree-awarding institutions are called food scientists or food technologists.

Importance of Food Science and Technology

Between harvest and consumption (i.e., from farm to mouth), postharvest losses usually occur. However, postharvest losses are minimised or prevented through processing and packaging that are integral parts of food science and technology. Through the application of food science and technology, the supply of raw food is increased and conserved for a relatively long period of time for human benefit. Food scientists and technologists have significantly complemented agriculturists to ensure the supply and availability of safe food with consistent high quality available at all time, and a wide range of delicious foods for consumption (Floros et al., 2010). Food Science has again led to a reduction in nutrient deficiency-related diseases. For example, in Ghana, the Department of Food Science and Technology, University for Development Studies, is collaborating with developmental partners to promote the production and consumption of orange fleshed sweet potato to help address the astronomically high vitamin A deficiency in the country. Products including bread, gari and yoghurt have been developed from the orange-fleshed sweetpotato which contains significant amount of dietary provitamin A, which is converted to vitamin A in humans.

Also, food scientists or technologists have contributed to the provision of foods that are less costly, convenient and require less preparation time, reduction in food waste and efficient global food distribution and storage (Floros et al., 2010). Thus, in today’s world, food scientists or technologists play a vital role by improving the quality of food consumed by human beings in a sustainable way.

Career Opportunities

Food technologists or scientists apply science and engineering to food production, processing, packaging, sale unless the food is manufactured under the supervision of a person with appropriate knowledge and qualification who can ensure the purity, quality and wholesomeness of the food. Therefore, in the Public Health Act 851 of Ghana, Section 106, it stated that “A person who shall not manufacture a food for sale shall not manufacture a food for sale unless the food is manufactured under the supervision of a person with appropriate knowledge and qualification who can ensure the purity, quality and wholesomeness of the food.”
any business of food for consumption should have a food scientist or technologist. But more importantly, the training acquired equipped food scientists or technologist to start their own food processing business.

Conclusion
It is commonly accepted that we are what we eat, this may not be wholly true. A food technologist trained at University for Development Studies knows that we are not only what we eat, but we are what we do not excrete. Thus, if you are considering a career to improve upon the life of humans, consider this noble discipline: Food Science and Technology, where food meets science.

Just for Your Information
Entry Requirements for BSc. Food Processing Technology in University for Development Studies
One must obtain (A1 – C6 in WASSCE or A – D in SSCE) in three Elective subjects: Physics, Chemistry and Biology; and three core subjects (English, Mathematics and Integrated Science). Diploma graduates in applied sciences with passes in core sciences (Physics, Chemistry and Biology) or related subjects can apply. Higher National Diploma (HND) graduates with at least 2nd Class Upper Division in Food Technology/Science related field (excluding Home Economics) would be admitted from second year.

References


