

Department of Food Science, Nutrition and Technology: The First Quarterly Newsletter

Submitted by ooko.george on Tue, 2013-06-18 12:01

How healthy are the flavored milks?

By George O. Abong', Lecturer, DFSNT, UoN



Some flavored milks in the market

According to a report carried by daily nation newspaper on the 9th June 2013, the sixth Tetra Park Dairy Index highlights indicate a surge in the demand for ready-to-drink flavoured milk seemingly driven by busy, health and taste driven consumers. It is reported that the uptake of flavoured milk has been growing over the past few years, boosted by a combination of factors, including growth in consumer income, consumption of flavoured milk having grown by 59 per cent between 2012 and 2013. This growth has been driven by a growing middle class, with more and more children carrying flavoured milk to school. This report thus indicates that flavoured milk consumption is set to grow at more than double the rate of white milk globally between 2012 and 2015.

Many consumers are increasingly consuming flavored milks due to their tasty, nutritious and conveniently packaged nature in comparison to other beverages. Others have been driven by eagerness to try new foods and drinks. One question begs to be answered, 'how safe and healthy are these flavored milks?' almost all of the flavored milks are ultra-heat treated at temperatures not less than 120°C after being mixed with sugars and many different types of flavors. At high

temperatures, many chemical reactions between mixed components do occur which may include caramelization and maillard reactions. These reactions though produce desirable flavor compounds may also produce carcinogenic substances depending on the amount and rate of mixing the ingredients and heating temperature and time. Most often, the flavored milk have reasonably high levels of sugars to sweeten them to improve on taste. It therefore means that consumers are exposed to high levels of sugars depending on the consumption. Research is therefore needed to establish the exposure if any of these products. One would therefore consume these products with moderation.

Have you heard of anemic infants due to exclusive breastfeeding?

By James K. Gacheru, MSc. Applied Human Nutrition Student

Micronutrient deficiencies are common among children under five years and women. The most common micronutrient deficiencies include Vitamin A Deficiency (VAD), Iron Deficiency Anemia (IDA), Iodine Deficiency Disorders (IDD) and Zinc deficiency. In Kenya, children under five years have the highest prevalence of anemia (74%) and this has been classified as a nationwide public health concern of a scale sufficient to impede socio-economic growth. IDA is a serious public health problem and impacts on psychological and physical development, behavior and work performance. Globally, it is the most prevalent micronutrient deficiency and has affected more than 2 billion persons. Global estimates indicate that 47.4% of the preschool-age population is anemic and approximately 600 million children (both preschool-age and school-age) are anemic.

Breast milk has been recommended by the world Health Organization to be the best food for an infant less than six months. In regards to this, there have been growing controversy over the probability of some exclusively breastfed infants being anemic. Some studies have been conducted in different countries mostly in some isolated developed countries in South America with very few (if any) in some developing countries like Kenya. Given the dire consequences for anemia in child growth and development, there is need for us to focus resources towards this effect if we have to achieve our MDGs especially MDG 4 which is geared to reducing child mortality.

Young Kenyan professionals forge links to ensure food security and safety

By George O. Abong', Lecturer, DFSNT, UoN

About 50 % of foods produced in Africa go to waste and many foods related illnesses and death cases are reported all over the world weekly if not daily. Poverty, hunger and malnutrition have become common phenomena in many parts of Africa, East Africa being part of the bandwagon. Over the years, many government policies especially in African context, Kenya included, emphasized on high production of cash and food crops. Little attention has, however, been placed on post-harvest handling and processing of foods produced. As a result, food wastage has

been enormous causing farmers and governments massive financial and business loss. There is therefore, need to not only talk about food production but also have a critical look on postharvest handling and activities that follow thereafter. Serious concerns have arisen that hinge on food safety and it is currently an issue that requires urgent attention especially from the food scientists. In the light of these challenges, formation of an organized body comprising of scientists with a common interest and goal, 'food safety' is inevitable.

Prof. Ruth Oniang'o took the initiative of championing the formation of a body comprising of young professionals working in food related industry/institutions. She organized the first workshop in Nairobi to this effect under Kenya Union of Food Science and Technologists (KUFoST) that had been held in trust by Rural Outreach Programme.

Some of the participants of the food safety workshop, 20th August 2010

As a way forward, the workshop agreed on among other things that an interim office be formed to champion the interest of young professionals. Since then, Food Science and Technologist Platform of Kenya has been registered (FSTPK) and is spearheading efforts of involving young professionals find out homegrown solutions to our limitations. The pillar activities of the organization revolve around:

Encouraging adoption of new technologies

Advocacy with policy makers, private sector

Linkages: creating network of professionals in the related field

Capacity building: encourage personal growth

Mentorship: whether formal or informal is required to steer development

For more information send enquiries to, email: georkoyo@yahoo.com, visit website: <http://www.fstpkenya.com> (under construction)

The Five Laws of Money and Wealth Acquisition

Forwarded by Stephen Mureithi, UoN and Adopted from: <http://growpassiveincome.blogspot.be/>

Adapted from 'The Richest Man in Babylon' by George S. Clason © 1926. We highly recommend that you read this book at least once. The wisdom therein will transform how you deal with your finances. Wealth that stayeth to give enjoyment and satisfaction to its owner comes gradually, because it is a child born of knowledge and persistent purpose. To earn wealth is but a slight burden upon the thoughtful man. Bearing the burden consistently from year to year accomplishes the final purpose. The five laws of gold each rich with meaning, offer to thee a rich reward for their observance.

The First Law of Gold - Gold cometh gladly and in increasing quantity to any man who will put by not less than one-tenth of his earnings to create an estate for his future and that of his family.

Any man who will put by one-tenth of his earnings consistently and invest it wisely will surely create a valuable estate that will provide an income for him in the future and further guarantee safety for his family in case the gods call him to the world of darkness. This law always sayeth that gold cometh gladly to such a man. I can truly certify this in my own life. The more gold I accumulate, the more readily it comes to me and in increased quantities. The gold which I save earns more, even as yours will, and its earnings earn more, and this is the working out of the first law.

The Second Law of Gold - Gold laboreth diligently and contentedly for the wise owner who finds for it profitable employment, multiplying even as the flocks of the field.

Gold, indeed, is a willing worker. It is ever eager to multiply when opportunity presents itself. To every man who hath a store of gold set by, opportunity comes for its most profitable use. As the years pass, it multiplies itself in surprising fashion.

The Third Law of Gold - Gold clingeth to the protection of the cautious owner who invests it under the advice of men wise in its handling.

Gold, indeed, clingeth to the cautious owner, even as it flees the careless owner. The man who seeks the advice of men wise in handling gold soon learneth not to jeopardize his treasure, but to preserve in safety and to enjoy in contentment its consistent increase.

The Fourth Law of Gold - Gold slippeth away from the man who invests it in businesses or purposes with which he is not familiar or which are not approved by those skilled in its keep.

To the man who hath gold, yet is not skilled in its handling, many uses for it appear most profitable. Too often these are fraught with danger of loss, and if properly analyzed by wise men, show small possibility of profit. Therefore, the inexperienced owner of gold who trusts to his own judgment and invests it in business or purposes with which he is not familiar, too often finds his judgment imperfect, and pays with his treasure for his inexperience. Wise, indeed is he who investeth his treasures under the advice of men skilled in the ways of gold.

The Fifth Law of Gold - Gold flees the man who would force it to impossible earnings or who followeth the alluring advice of tricksters and schemers or who trusts it to his own inexperience and romantic desires in investment.

Fanciful propositions that thrill like adventure tales always come to the new owner of gold. These appear to endow his treasure with magic powers that will enable it to make impossible earnings. Yet heed ye the wise men for verily they know the risks that lurk behind every plan to make great wealth suddenly. Forget not the rich men of Nineveh who would take no chance of losing their principal or tying it up in unprofitable investments.

Ten years from now, what will you tell about the gold in your possession today? Get hold of this book (download a free pdf copy) and see whether it will influence your answer to that question. I bet it will.

Our products

Editors:

Message from the editor: Dr. George Ooko Abong', Lecturer, Department of Food Science Nutrition and Technology

Welcome to the Department of Food Science, Nutrition and Technology, one of the most active departments in the faculty of Agriculture, University of Nairobi. The department boasts of some of the most competitive courses in the University, in the fields of Food Safety, Food Science and Technology as well as Food Nutrition and Dietetics. The Department offers courses in at all levels in these fields and has produced prominent alumni who have served Kenya and the world. The department has continued to evolve and revise its curricula to keep at par with new developments in the labour market. We shall endeavor to have quarterly newsletters covering array of issues. Watch out for our articles which shall be informative and educative in this segment. In the current issue we have carried information on the following topics:

Health and flavored milk

Anemia and exclusively breastfed infants

Role of professional groups in food science fraternity

The Five Laws of Money and Wealth Acquisition

Products from our department