Improving Nutrition and Food Safety Awareness in South Africa through Interactive Package Design

by Maame Ekua Manful

Nutrition and food safety are critical for good health and well-being, and it is never too early to start educating children about these important concepts. Learning about nutrition and food safety can be made exciting and interesting for kids through concepts such as interactive food packaging designs. The concept involves incorporating features on product packaging to encourage user engagement through activities such as games or challenges beyond the traditional packaging role.

The Food Package Design Challenge co-organized by the Food Science for Relief and Development (FSDR) program of the IFT International Division, the South African Association for Food Science and Technology (SAAFoST), and Holanathi, a South African food company that manufactures and distributes meals to vulnerable communities and schools, is an excellent example of how interactive food packaging can help increase food safety and nutrition awareness among children in South Africa.

The Food Package Design Challenge was launched in September 2022 with the aim of creating informational cereal boxes in support of Holanathi’s food outreach activities. The competition was open to both student members and non-members of SAAFoST who were enrolled in South African tertiary institutions. Participants were challenged with designing food packages that featured nutrition and food safety messages targeted at school-going children aged between 6-13 years in a fun and engaging way.
Nine entries were received, and the judges, including representatives from Holanathi, SAAFoST, and FSRD-IFT, had the difficult task of choosing a winner. The judges were impressed by the creativity and originality of the entries, but ultimately, Anthony Hobden, a master's student at the University of Pretoria, emerged as the winner.

Anthony's winning design featured colorful illustrations and playful activities including messages about nutrition and food safety for children. Anthony’s design also included activities to help children count the number of glasses of water they had drank and list foods eaten with a reminder to wash their hands. As the winner, Anthony received several rewards, including a cash prize, Holanathi hamper, a 6-month internship with Holanathi, and mentorship with an expert (Deepti Prasad) from the Institute of Food Technologists (IFT).

But the success of the Holanathi Package Design project did not end with the competition. A special edition of Holanathi's cereal product was packaged with Anthony's winning design, and it was distributed to children in the Western Cape in November 2022. Nicolle Oberholzer, a food scientist at Holanathi, was thrilled with the design, saying, “I believe the design was something all the children can relate to, but also made an interactive way for the children to learn about basic hygiene as well as good eating habits”.

The Design Challenge is a great example of how food scientists can make an impact by unleashing their creativity in educating children on nutrition and food safety practices. By bringing together various stakeholders, the IFT-FSRD Global Projects Team supported SAAFoST and Holanathi to engage food science students and experts to contribute to increasing food

Anthony’s winning entry in the Design Challenge: original design (above); original design made ready by Holanathi’s in-house designer (below).
Source: Holanathi-SAAFoST
safety and nutrition awareness among South African children. Educating children can be effective when presented in a fun and engaging way, and interactive food packaging is a powerful tool for achieving this.

By engaging young people in fun and creative ways, we can help them develop good eating habits and a better understanding of food safety. This IFT-FSRD, SAAFoST and Holanathi collaboration serves as a reminder that educating children on nutrition and food safety can be made exciting through the use of innovative and engaging methods. Through such initiatives, we can pave the way for a healthier and more informed future.

Special thanks to the judges, project team, and organizations that contributed to the success of this project.

**Judges**
Ingrid Woodrow, CEO, SAAFoST
Maame Ekua Manful, FSRD member and Ph.D. Student at Technological University Dublin, Ireland
Nicolle Oberholzer, Technical Manager, Holanathi
Alrie Lubbe, Head of Design, Holanathi

**Project Team**
Ingrid Woodrow (CEO, SAAFoST), Lisa Zychowski (FSRD), Donna Rosa (FSRD), Maame Ekua Manful (FSRD and Ph.D. Student at Technological University Dublin, Ireland), Nicolle Oberholzer, (Technical Manager, Holanathi), Alrie Lubbe (Head of Design Holanathi), Gina Athanassiou (CEO and Founder, Holanathi).

**Organizations**
IFT FSRD
SAAFoST
Holanathi

**Supporting Members**
Tsetse Baloyi (Communications Officer of SAAFoST), Irene Burke (SAAFoST)

**About the author** Maame Ekua Manful is a member of the IFT Food Science for Relief and Development (FSRD) and a PhD student at TU Dublin, Ireland.