

Comprehensive analytical program for animal products in South Africa

Hettie C. Schönfeldt, Nicolette Hall, Ina van Heerden , Marina Bester, Zani Du Plooy, Jeanine Sainsbury

Background

South Africa, a developing country with many areas of poverty and food insecurity in between developed communities, has a unique national nutritional profile. Overnutrition, e.g. overweight and obesity, is on the increase in the midst of persistent undernutrition and nutritional deficiencies. A wide variety of cultures - each have their own unique food preferences and consumption patterns – are found within South Africa, increasing the complexity of the food environment. The diversity of the South African population, both in terms of nutritional concerns and dietary habits, highlights the importance of country specific nutrient composition data.

Improve evidence basis

Under the leadership of Professor Hettie C. Schönfeldt at the University of Pretoria, five researchers have completed their degrees through the compilation of an extensive amount of food composition data on a variety of animal products. Animal source foods are a favourite food product in the country, and although these foods can play a role in improving undernutrition through the provision of essential nutrients such as iron and B-vitamins, animal source foods are often scrutinised as contributing to nutritional diseases associated with overnutrition. With limited to no national incentive to support food composition data generation, industry funding was obtained to support the 5 large research projects.

Programme implementation

The five young researchers, namely Dr Nicolette Hall (grass fed and grain fed beef), Dr Ina van Heerden (lamb), Ms Marina Bester (offal), Ms Zani Du Plooy (cultured milk), and Ms Jeanine Sainsbury (mutton) performed the research projects as part of their post graduate degrees. Data obtained include nutrient data on different cuts of lamb and beef, as well as the effect which fat trimming has on the composition. Chicken, offal (from various animals including beef, chicken, lamb, mutton) and maas (a traditional South African drink made from fermented milk) were analysed.

Success

From the data generated, 13 articles have been published in a variety of national and international scientific journals and popular media. The data was also published in 9 pamphlets and 13 booklets that were distributed to consumers, doctors and health professionals. These publications were funded by the various industry partners supporting the research. These studies also formed part of three MSc and two PhD degrees. All of these students have excelled as researchers in the field of nutrition and food composition.

Source

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