

## **Project Muwonge (Uganda)**

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### **Supplements, herbs and doping products usage among Uganda athletes and coaches.**

Nutrition supplements are widely consumed in many regions of the globe today. In addition, the rise of potentially harmful substances sold under the umbrella of supplements has found a way in markets in developing countries. The marketing and use of herbal plants as medicines in Uganda has drastically increased in recent times (Asiimwe, Namutebi, Borg-Karlsson, Kamatenesi-Mugisha, Oryem-Origa, 2014; Joshi & Joshi, 2000; Kamatenesi-Mugisha, Oryem-Origa, 2005). Yet herbal products are categorized as dietary supplements and regulated in some countries. (Sellami et al, 2018). In 2013, the government of Uganda approved the usage of herbal medicine for health care (Uganda gazette, 2013; WHO, 2013), leading to push by the Ministry of Health to incorporate the usage of herbal medicines in management of ailments, such as cancer. The phytochemical profiles of most medicinal plants, and herbal concoctions is still unknown, and yet some medicinal plants possess performance enhancing effects, with a potential to act as doping agents. More so, the consumption of a combination of supplements, herbal products and some untested products, may result in inadvertent doping by some athletes.

Available anecdotal evidence suggests that the usage of herbal remedies in various groups including sports participants in Uganda is on the rise (Ssemugabi, 2015). In fact, our recent studies indicate gaps in nutritional and doping knowledge among Ugandan athletes (Muwonge, Zavuga & Kabenge, 2015; Muwonge, Zavuga, Kabenge & Makubuya, 2017) and a lack of consistent education programming for support staff, which is absolutely vital. More so, athletes in Uganda's neighboring countries consume herbs as supplements due to a number of reasons including performance enhancement and to boast the nutrient content in their normal diets (Chebet, 2014, Otieno & Ofulla, 2009; Onywera, 2009; Orwa, 2002). This consumption is obviously noticeable among key Kenyan athletes, who have fallen into a trap of inadvertent doping from herbal supplements. This inadvertent doping revelation, particularly with the consumption of products such as strychnos have led to the banning of Felix Kirwa by the International Association of Athletics Federation (IAAF). Strychnines are listed on WADA's list of banned substances, yet are regarded as useful medicine for athlete's foot, and tooth decay in Uganda (Tugume et al, 2016). Therefore, determining the prevalence of supplement usage including herbal products, doping agent usage and susceptibility amongst Ugandan athletes, can help to extrapolate the proportion of Ugandan athletes who could be at risk of inadvertent doping.

The objectives of this project are:

1. To evaluate supplement and herbal product usage amongst athletes from all major sporting codes in Uganda
2. To evaluate the usage of doping substances or methods amongst Ugandan athletes from all major sporting codes.
3. To determine the existing framework for intervening in herbal products usage among athletes and support personnel in Uganda
4. To examine the existence of anti-drug abuse interventions targeting the misuse of herbal

products among Ugandan athletes and support personnel.

5. To determine the level of susceptibility to doping agent usage among Ugandan athletes and suggest recommendations for an intervention.