Background

In 1908 Dr Mitchen Cots won Noble price for discovering the friendly Probiotic bacteria and said , If adults maintains the same number of probiotics as those found in children who breast fed for two years , then they may live double his age( he was 70 years old when he made that statement), Bogratt , the Godfather of Medical doctors wrote in Doctor’Oath :

Let food be your Medicine and let Medicine be your food However, in 1928 AntiBiotics which kills both bad and friendly probiotic bacteria , was discovered and was commercialized in 1942 . The last sixty years of the nineteenth century witnessed escalation of lifestyle diseases as well as use of AntiBiotic drugs . With absence of The friendly probiotic bacteria and it’s Prebiotic food from both clinical research and trading circles.

Recent clinical research has proven that most lifestyle diseases are caused by the deficiency of the friendly probiotic microbiota in the colon.

The WHO expert group (2001)defined probiotics as ‘live microorganisms which when administered in adequate amounts confer a health benefit on the host’. The prebiotic which is food for probiotics is defined according to FAO working group (2007) as ‘A prebiotic is a non-viable food component that confers a health benefit on the host associated with modulation of the microbiota’

2) Nutritional Justification

New scientific and clinical research has proven that prebiotic and probiotic will play a leading preventive and Curative role in the fight against lifestyle diseases.

However Most Natural foods lack prebiotic nutrients and at the same time most people , being health professionals or non-professionals do not differentiate it from Probiotics. The two names have almost same letters and pronunciation. Since 2007 the market was flooded by Probiotic nutrients products , both as standAlone and as an ingredient . Probiotic products can not substitute Prebiotic products for many reasons as follows :-

a) Technological challenges prevents production of high numbers of probiotic strains which are needed in trillion amounts to confer significant health benefits in the colon host

b) There are between 500 to 1000 types of friendly probiotic strains in the colon and the maximum numbers of strains used in probiotic products has not yet exceeded 12 strains

c) The feeding of the colon with few number of strains may cause imbalances in the total number of strains available in the colon

d) The already low number of strains used is expected to loose their number having to pass through the acid medium of the stomac and the base medium of the small intestine Despite these challenges , the market has seen the release of so many unsuccessful probiotics Products . In 2009 EFSA has disqualified over 183 probiotic products and recent research has shown that probiotics are not effective (,). As a result of this nutritional gap due to ineffective probiotics and unavailability of natural foods with rich levels of prebiotic nutrients many investors has Managed to extract prebiotic Oligosaccharides from a non edible sources like chicory roots Unfortunately Gum Arabic being the only edible plant with rich prebiotic Polysaccharides (over85%) is classified as food Additive by WHO/FAO , and is used like that for the last 60 years .

If an international Guideline for prebiotic is established then natural and non natural prebiotic could be recognized globally and have it differentiated from probiotics or additive use Further more , the natural way of
increasing the number of probiotic strains in the colon is to feed them with prebiotic nutrients, just like feeding seed of probiotic strains in the colon of new born bays, by taking mother milk rich in natural prebiotic for two years. Breast fed babies never needed to take probiotic as replacement for 100% natural milk prebiotic

3) Trade Justification

Having separate International guidelines for probiotics and Prebiotics will help fair trade and in particular open new investment opportunity to trade Gum Arabic as Prebiotic to increase both its use and prices compared to its current limited use as additive as well as its low traded price. Being an additive Gum Arabic is not allowed to be used in baby foods, but if the Guideline recognize it as a Prebiotic nutrients then it will be used in the baby food sector which is worth of $600 billions annually