

SAGO PREBIOTIC

THE FIRST LOCALLY-SOURCED PREBIOTIC

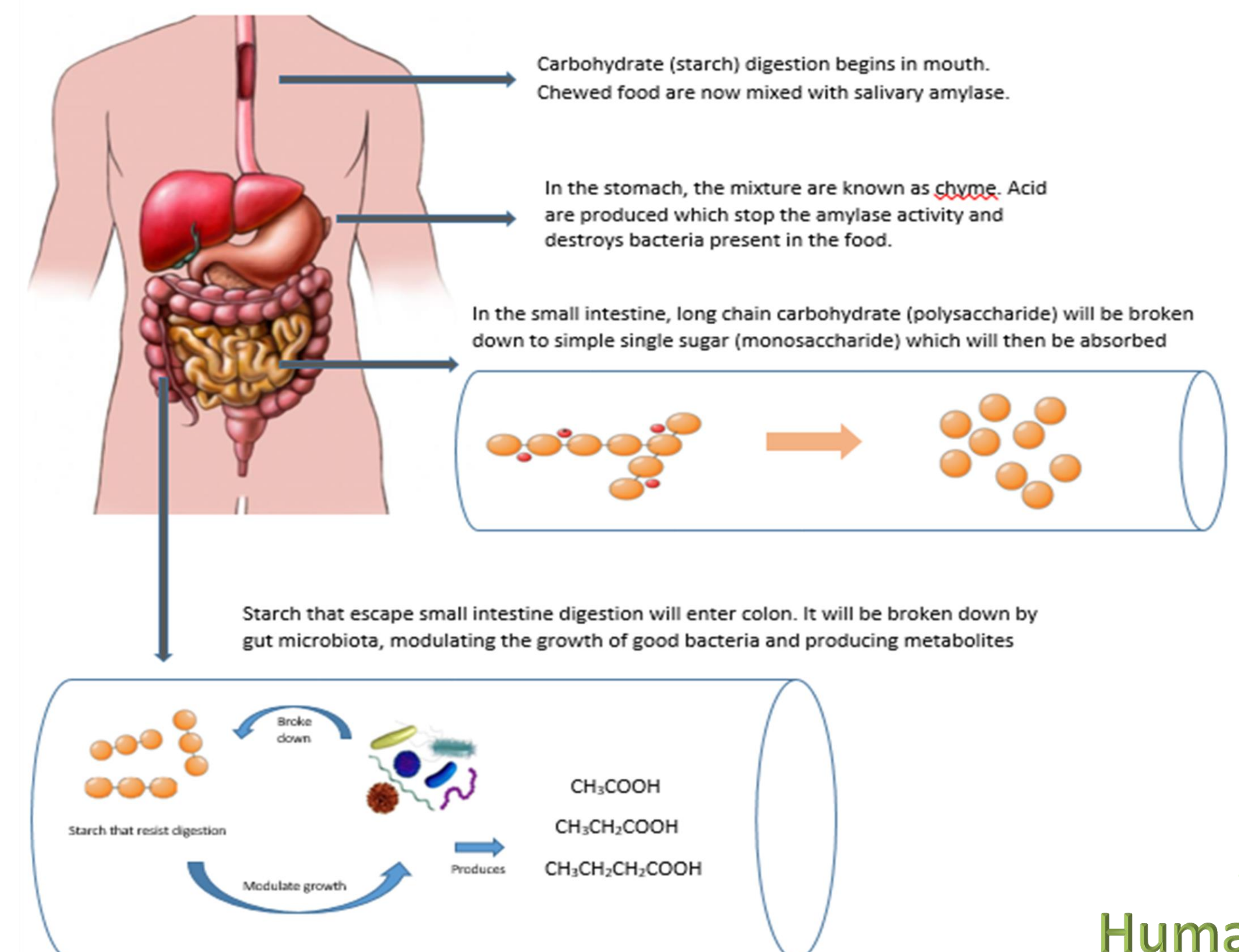
PATENT NO. PI 2018001957



Modified Sago Starch



Sago Prebiotic (Pack of 500g)



Prebiotic Action in Human's Body

INTRODUCTION OF TECHNOLOGY

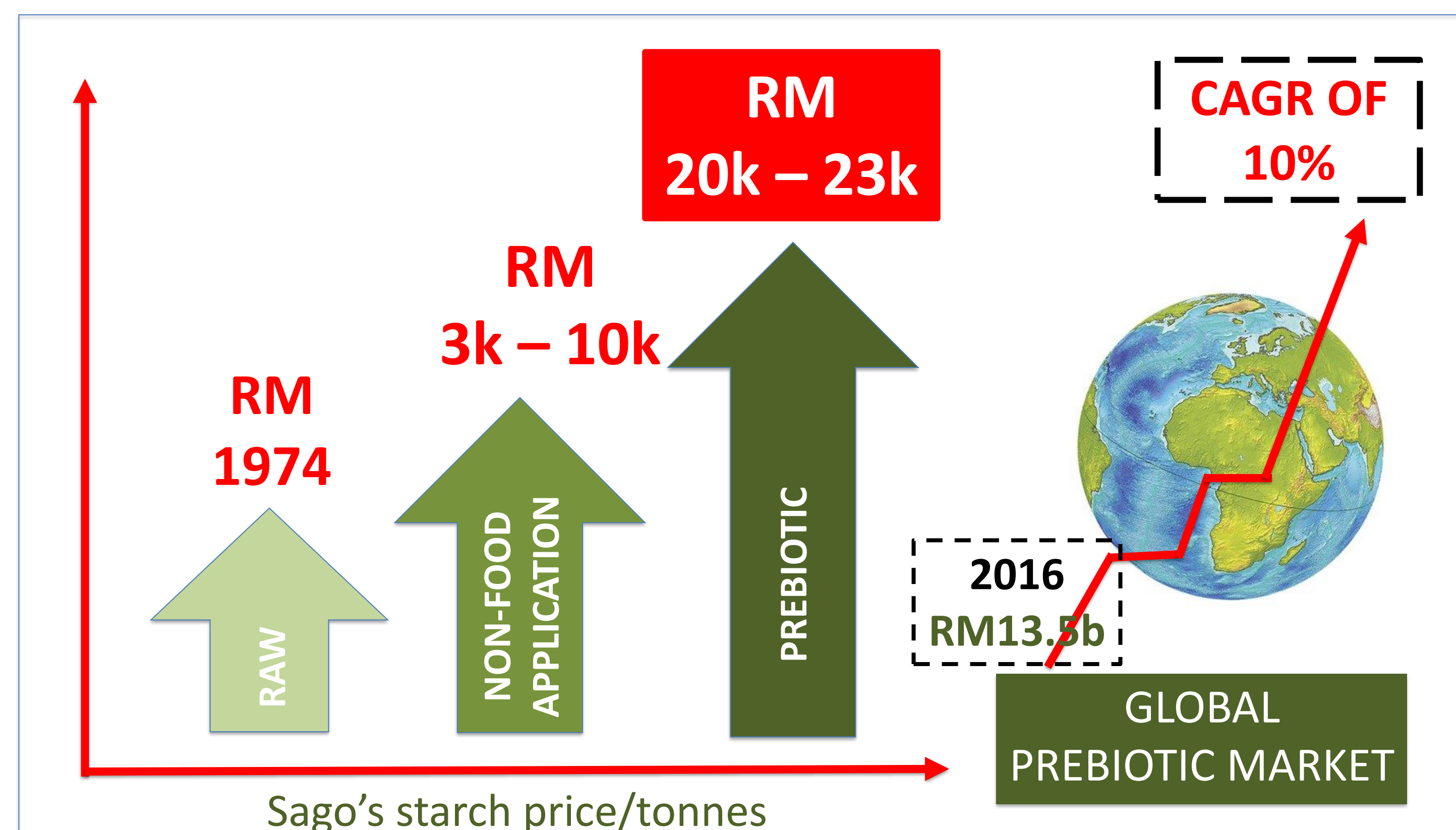
Prebiotic is a functional food ingredient that promote the growth of good bacteria (*Bifidobacterium spp.* and *Lactobacillus spp.*) and inhibit the growth of harmful bacteria (*Clostridium spp.*). Once consumed, it resist upper gastrointestinal body digestion and will reach the colon where it will be selectively broken down by the good bacteria. The resulting metabolites includes Short Chain Fatty Acid (SCFA) such like butyrate, propionate and acetate. These SCFA is an important player in the prevention of many chronic metabolic diseases (i.e. Diabetes Mellitus, Hypertension) and also colon cancer.

INVENTION

- Sago Prebiotic developed from a combination of chemical modifications on sago starch. Starch flour with healthier gut implication as opposed to the usual wheat and corn flour.

ADVANTAGES

- Increases the number of *Lactobacillus spp.* and *Bifidobacterium spp.* by 3.5 and 2 fold respectively when compared to a currently marketed resistant starch as a prebiotic (Brand F).
- Decreases the number of *Clostridium spp.* by 1.6 fold when compared to Brand F.
- Mice fed with sago's prebiotic showed the highest acetate, lactate and propionate after 4 weeks of feeding.



MARKET POTENTIAL

1. Sago Prebiotic is suitable for

- B2B market (Functional Food Industry, Bakery and Baked Goods Industry)
- Direct consumer, especially towards obese and diabetic consumer.

2. Marketability as;

- Flour substitute with added health benefit.
- As an alternative to popular probiotic product (i.e. Yakult, Vitagen etc.)
- Satiety promoting, low glycemic index food.

3. Global Market Growth

- Grand View Research expecting a Compound Annual Growth Rate (CAGR) of 10% over the forecast period (2018-2024).
- The same trend is expected in the overall functional food market in Malaysia, which is valued at US\$2.205 B in 2013 (Euromonitor Int, 2014).



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