

REFLECTION (V-FACTORY)

- How are you going to ensure that the product is safe?
- Based on the seven principles of HACCP, determine the requirements needed for the product is safe for consumers.



A product is considered safe when it agrees with discipline describing handling, preparation, and storage in ways that prevent food illnesses. Our trip to Vitagen factory actually gives us more clarification about the product. The product is not only best to be consumed but also safe because it undergoes many procedures and tests before it is being marketed in order to make sure consumer get all the goodness in one bottle.

To briefly describe the process, first, the powder skimmed milk will be pasteurized at 90°C for 30 minutes to kill all the bacteria. Then, the milk is fermented with billions of live probiotic cultures (good bacteria i.e. *Lactobacillus acidophilus* and *Lactobacillus casei*). Then, it will be stabilized to homogenize the milk. The milk is now ready to come in variety of flavors except LB variant. Pure fruit juice is mixed to ensure the freshness. Vitagen come in many flavors like apples, grapes, oranges, pineapple and LB (natural). Finally, it will be stored in storage tank. Throughout the whole process, they really care for the hygiene. All workers wearing head cover

and gloves to prevent pathogens spreading. What we can say is, they really strict with the five principle of food hygiene.



The laboratory is staffed by the finest technical personnel who are constantly in pursuit of innovative new products. Many expert machines are used in processing and packaging the products. The workers used them properly with regulated procedures. This milk product is supported by an efficient distribution and sales network covering key market centers located throughout the country. Special refrigerated delivery trucks and vans travel the length and breadth of Malaysia to ensure products reach retail outlets as fresh as the day they leave the Malaysia Milk plant. This is in keeping with their commitment to quality.

- How are we going to ensure the packaging obey the requirements needed?



The product approved legally by JAKIM, together with HACCP . Thus, Vitagen are approved to be halal products and can be consumed by muslims. HACCP or Hazard analysis and critical control points, is a systematic preventive approach to food safety and pharmaceutical safety that addresses physical, chemical, and biological hazards as a means of prevention rather than finished product inspection. HACCP systems must be based on the seven principles articulated by the NACMCF (National Advisory Committee on Microbiological Criteria for Foods). The seven principles are: (1) hazard analysis, (2) critical control point identification, (3) establishment of critical limits, (4) monitoring procedures, (5) corrective actions, (6) record keeping, and (7) verification procedures. All of these principles are important for any products. Vitagen products also need all these requirements to make sure they are safe for consumers. The products undergo quality control processes such as microbiological test, chemical composition test and physical characteristics. Physical characteristics meant by the packaging of the products. For the packaging process, sterilized bottles are being used, together

with the aluminium cap. These kinds of packaging are applied to ensure the best quality, freshness and the goodness of the cultured milk products.