

# Rapid analysis of vitamin A and D in fluid milk

Recent medical studies have once again determined the importance of having Vitamin A and D in our diets and the issue of fortification of food and drinks has become a vital one to the food processor industry, the regulatory agencies and the consumer at large. Vitamin D in combination with calcium is known to greatly reduce the number of bone fractures not only in adults over the age of 50, but is also important for all age groups for proper bone health.

Recent reports show vitamin D also has other benefits ranging from links between Vitamin D deficiency with tuberculosis, multiple sclerosis and cancer. The Canadian Cancer Society recommends



that it is important to intake higher doses of Vitamin D in order to decrease the risk of future ailments; such as colon cancer and osteoporosis. 50% of the children under the age of 5 have

been found to have inadequate amounts of Vitamin A in their diets, critical in childhood development and especially important in preventing childhood blindness.

While it is important to add these vitamins to our diets it is not without risk. Fortification of food and drinks has the potential danger of the food processors adding too little or too much of the supplement to the product. As an example fluid milk is a drink that is fortified with both Vitamin A and D, but it may not always contain the correct concentration of these supplements as stated on the label. Testing for proper levels of the vitamins does not occur until after the milk has reached consumer shelves, due to the lack of real time analysis of Vitamin A and D in milk. Currently 3-5 days is required for analysis which is a tedious task requiring trained personnel and expensive lab equipment.

SciMed Technologies Inc. has developed a diagnostic kit that will allow for the testing of the fluid milk's concentration of Vitamin A and D before the milk is packaged. By reducing the testing time from 3-5 days to as little as 2 hours. SciMed Technologies, Inc has made the process of extraction of Vitamin A and D from milk quick, cost effective and accurate and allowing for corrections to be made to the product before it is shipped to consumers. SciMed Technologies, Inc ELISA based diagnostic kit allows one technician to do up to 41 samples at once in a 2 to 3 hour process time.

With error rates being as low as 4%, SciMed Technologies, Inc Vita kits are based on Enzyme-Linked Immunosorbent Assay technology that has been widely accepted within the scientific community as quick, simple, reliable and accurate for determining quantities of a large range of biologically important compounds. The Vita kits A and D are based on proprietary monoclonal antibodies developed by SciMed Technologies for this purpose.



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