



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES**

Thirty-eighth Session

Hamburg, Germany

5 – 9 December 2016

OTHER BUSINESS AND FUTURE WORK

Methods of analysis in the *Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CODEX STAN 72-1981)*

(Prepared by the United States of America)

INTRODUCTION

1. The *Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CODEX STAN 72-1981)* was revised in 2007. At the 30th session of the CCFSDU (2008), the electronic working group (eWG) on methods of analysis for infant formulae recommended that the Committee periodically review the methods in the infant formula list in the *Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999)* to keep them updated (ALINORM 09/03/26). In 2009 and 2016, the Codex Committee on Methods of Analysis and Sampling (CCMAS) endorsed the status of several methods of analysis of nutrients in CODEX STAN 72-1981 based on the best available methods in matrices at the time (ALINORM 09/32/23 paras. 45-71; REP16/MAS para 30-39 and 44, Appendix II). These methods were adopted by the Codex Alimentarius Commission in 2009 and 2016, including various Type I, I, III and/or IV methods, and are included in the *Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999)*.

BACKGROUND

2. To date, some methods referenced in CODEX STAN 72-1981 and CODEX STAN 234-1999 are outdated and/or not validated for infant formula. Further, for some required nutrients and many optional ingredients, Codex Official Reference Methods are lacking.

3. During its 37th Session, CCMAS endorsed methods for Vitamin A, Total Nucleotides, Pantothenic Acid and Iodine as Type II and a method for Chromium, Selenium and Molybdenum as Type III (REP16/CAC paras 46-47). All of these methods were adopted by the Codex Alimentarius Commission (CAC) during its 39th Session. CCMAS also endorsed methods for Vitamin B12 and Fatty Acids as Type II but asked CCFSDU to clarify whether the existing Type II methods for these nutrients should be retyped as Type III (REP16/MAS para 33 and 38). CCMAS also asked CCFSDU to confirm whether the scope and forms to be measured by the methods for Vitamin E and Myo-inositol (REP16/MAS para 37 and 35) are the same as in CODEX STAN 72-1981.

4. A method of analysis for Vitamin C in infant formula has now been validated by a collaboration of international experts (through the AOAC International-led Stakeholder Panel on Infant Formula and Adult Nutritionals (SPIFAN)). The AOAC International has adopted and published this method in the Journal of AOAC International. This internationally accepted method is the process of being adopted by the International Organization for Standardization (ISO) as an ISO Standard.

PROPOSAL AND RATIONALE

5. The Committee is requested to consider submitting the method for Vitamin C to CCMAS for technical review, typing, endorsement, and inclusion in the *Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999)* in Part A, section "Foods for Special Dietary Uses," with the description "Infant Formula." This method reflects the most recent scientific method of analysis for Vitamin C in infant formula and has been validated in infant formula.

6. The Committee is requested to consider recommending to CCMAS that the method for Vitamin C in the *Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999)* that may be replaced by the AOAC official method in Table 1 (below) and is not validated for infant formula be removed or reclassified.

7. Table 1 presents the AOAC Official method of analysis for Vitamin C in infant formula. This method is also being developed as an ISO Standard.

TABLE 1. AOAC Official Method validated in Infant Formula

Commodity	Provision	Method	Principle	Proposed Type
Infant Formula	Vitamin C	AOAC 2012.22 ISO/DIS 20635	Ultra Performance Liquid Chromatography (UPLC)	Type II

Campos-Gimenez et al. Vitamin C in Infant Formula and Adult/Pediatric Nutritional Formula by Ultra-Performance Liquid Chromatography with Ultraviolet Detection: First Action 2012.22. J AOAC International Vol. 96, No. 5, 2013.