Proposal Subject Alternative Bacteriological Medium for the Detection of Fecal Coliforms in Seawater

Specific NSSP
Guide Reference

NSSP Guide Model Ordinance Chapter III. Laboratory @ .02 Methods A.
Guidance Document Table A.10 Approved NSSP Laboratory Tests:

Microbiological and Biotoxin Analytical Methods

Text of Proposal/ We present an alternative bacteriological medium to the A-1 medium for the detection of fecal coliforms in seawater. The new bacteriological medium is called A-1 medium minus salicin. A collaborative study was done and the results were published in a peer-reviewed

journal (see attached copy).

Public Health Significance None

Cost Information (if available)

Savings in laboratory costs due to the elimination of the expensive carbohydrate salicin from

the A-1 medium.

Action by 2003 Task Force I Recommended referral of Proposal 03-108 to the appropriate committee as determined by the Conference Chairperson. The Committee is requested to develop a strategy for a national study that would involve individual states wishing to participate in a comparative study. The Committee should review the findings of the study and develop appropriate recommendation

regarding substitution of A-I media.

Action by 2003 General Assembly Adopted recommendation of 2003 Task Force I.

Action by USFDA Concurred with Conference action.

Action by 2005 Laboratory Methods Review Committee Recommended that A-1 minus Salicin be adopted as optional and any state that eliminates Salicin must show equivalency with a minimum of 30 samples seasonally (4 sets of 30 samples). The samples must generate results and the results must not be significantly different as shown by using a T test. The data generated to support the elimination of Salicin must be submitted to FDA for review and concurrance prior to state action to eliminate the use of Salicin.

Action by 2005 Task Force I Recommended adoption of the Laboratory Methods Review Committee recommendation on

Proposal 03-108.

Action by 2005 General Assembly Adopted recommendation of 2005 Task Force I.

Action by USFDA Concurred with Conference action.

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Research Note

Modification of an Approved Medium for Fecal Coliform Detection in Seawater: A-1 Medium Minus Salicin

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ABSTRACT

Four hundred fifteen shellfish seawater samples from approved, conditionally approved, and restricted areas along the coastlines of Connecticut, Massachusetts, and Maine were tested in duplicate to compare results obtained with A-1 medium (AOAC official method no. 978.23) and those obtained with A-1 medium without salicin. Four laboratories used five sets of most probable number procedures to perform the analyses. No statistically significant differences between the two media were found with the t test, the F test, or the analysis of variance.