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MILK: ONGOING ACTIVITIES AND FUTURE PROSPECTS

Edited by

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PREFACE

Breast feeding is today more than ever a matter of debate onto which the interest of the scientific community is unceasingly focused. Breast feeding has been almost consistently recognized over the decades as superior to other methods from both a nutritional and psychological point of view. However, the precious properties of human milk can be spoiled by an array of detrimental factors to a vast extent attendant to the adverse effects of haphazard technological growth and consequent generalized environmental pollution.

The most serious problems affecting breast feeding have been addressed by the World Health Organization since 1973 in a series of fundamental publications, the major merit of which is probably that these works reflect the overall effort to arrive at updated and reliable information on organic and inorganic components of human milk in a variety of countries under different life conditions. The importance of such undertakings and that of their targets cannot be underestimated given the multitude of inconsistent data plaguing the scientific literature in this field. This in turn highlights the present keen need for sound and harmonized planning of experimental protocols and the establishment of thorough analytical quality assurance principles.

Much along the same line, a number of investigations have been launched in the recent past by several research groups of the Istituto Superiore di Sanità, some in close cooperation with international organizations, in order to shed further light on several pressing issues. These encompass the consequences of the nuclear accident at Chernobyl, the safety of breast milk in the light of widespread polluting phenomena caused by pesticides and other noxious industrial chemicals, and the obtainment of baseline figures for some elements and organic substances of priority for the assessment of the nutritional integrity of this fluid as well as of its conformity with general health requirements. Two further aspects, on the other hand, regard cow milk and its content of exogenous compounds either through intentional administering to the animal or contamination of the secretion through different pathways.

The selection of papers collected here thus forms an overview of the activities performed by the Istituto Superiore di Sanità as well as a summary of current approaches and prevalent trends within this general theme. Although the investigation does not claim to cover all possible aspects related to milk, the scenario which emerges accounts for the manifold nature of the above studies. It should be noted, however, that the results achieved give a picture which illustrates the state-of-the-art at the end of the first half of 1989, while at the same time form the premises for ongoing researches aimed at broadening the comprehension of open issues.

The Editors

S. Caroli, E. Coni and E. Sabbioni