12 May 2009

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President Barack Obama
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Mr. President and Staff,

We present to you a modest proposal for your consideration. If adopted, we believe it will have a number of positive effects on our country and the world:

- improving the physical and psychological health and well being of the next generations of our children, and
- reducing the terrible costs of cancer in our society and health care system.

It has been well established that breastfeeding of infants is the natural and superior approach to creating healthy individuals. Breastfed babies have stronger immune systems, fewer allergies, less probability of developing childhood (and likely adult) cancers, half the chance of dying of SIDS [1], lower probabilities of developing diabetes and other chronic diseases, and, in breastfeeding, have the opportunity to bond with their mothers. All medical groups advocate breastfeeding above any other approach to infant nutrition. [2] Recent studies [3, 4] have also shown that women who have breast-fed are at lower risk than mothers who have not for developing high blood pressure, diabetes and cardiovascular disease decades later, when they are in menopause. Any program that could increase the number of infants breastfed and the length of time they are breastfed would be advantageous to the individuals involved as well as to society at large because of the downstream consequences.

Likewise, it has been known since 1995 that human mothers' milk (unlike that of other mammals) contains substances that can kill cancer cells. This has been demonstrated in vitro[5] and in pilot animal [6] and human [7] studies. Ongoing research has mostly been pursued in Sweden to date. [8-29] The main substance, a form of the protein alpha-lactalbumin, is modified in the gut to a new molecular shape, called HAMLET, which is selectively taken up by cancer cells and causes them to undergo programmed cell death (*apoptosis*), while leaving normal cells unaffected. In fact, ingestion of human mothers' milk has led to the prostate cancer of one of us becoming undetectable and remaining so for almost ten years since he was biopsy diagnosed. [30]

Our proposal has several aspects:

1. A program should be established to encourage women to breastfeed their infants for at least one year. In order to enable this, a federal subsidy should be put in place for these women, much as is done in Europe. As a *quid pro quo*, they would need to pump their extra milk and donate it to a set of milk banks. (These may be an expansion of the extant non-profit and under-funded

Human Milk Banking Association of North America facilities. [31]) Here, the milk would be screened and then distributed to those who need it, other infants, cancer patients, and others needing immune system boosting, as determined by their doctors. The milk banks within this system already collect milk from screened volunteer donors, screen the milk, and distribute it to infants in need of human milk (and some cancer patients). This life saving activity and organization would need to be taken much more seriously from the health care establishment for the success of this program.

2. Cancer patients, in consultation with their doctors, would use mothers' milk as a monotherapy or an adjuvant to their other therapies.
3. Concurrently, and as a preliminary to setting up this system, NIH would fund academic and intramural research programs to further elucidate the nature of the cancer fighting capabilities of human mothers' milk, its pharmacokinetics, and other aspects of the best practices in its medical use. Since mothers' milk is a natural substance, abundantly available, it is unpatentable and therefore of negative interest to the profit oriented pharmaceutical medical industrial complex, and so requires public funding and advocacy for the vast potential public benefit to be realized.

Another positive aspect of this program would be the bonding experienced by mothers and their children, which could increase family and social cohesiveness, thereby decreasing the amount of social disconnection, mental problems and crime later in the infants' lives. Women who today are forced to return to work mere weeks after giving birth cannot fully emotionally bond with their children, and *vice versa*.

We encourage the creation of a multi-disciplinary task force to further explore and flesh out this program and its social and medical underpinnings. We see it as one small but significant aspect of improving the social and physical health of America and reining in the escalating health care costs, direct and indirect, that are draining our nation and its people.

Thank you for your consideration.

Sincerely,

Howard J. Cohen, Ph.D.
Barbara L. Cohen, M.A., LMFT

cc:
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Notes

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Human Milk Banking Association of North America