

HP-264

From: Tracie Gillespie [traciegillespie@fastmail.fm]  
Sent: Thursday, October 12, 2006 9:52 AM

Patricia N. Daniels  
Director, Supplemental Food Programs Division Food and Nutrition Service USDA  
3101 Park Center Drive  
Room 528  
Alexandria, VA 22302

“Docket ID Number 0584-AD77, WIC Food Packages Rule,”

Dear Ms. Daniels:

I am writing to thank USDA/FNS for its efforts in bringing the WIC food packages up to date with current nutrition guidelines.

As a former WIC participant and current professional in the field of nutrition, I have seen firsthand the effects of the WIC program from both sides of the fence.

As a participant, I relied on the foods provided by WIC to feed myself while pregnant and nursing, and to provide adequate nutritional foods for my children (2). The WIC checks enabled our family to eat more healthy and get important nutrients. While I was grateful for the WIC program, at the same time, I was frustrated by the limitations of the available foods. There are so many healthy foods available now, and the WIC list is so incredibly short! Updating the WIC guidelines is much needed and long overdue.

As a maternal and child health professional in the field of nutrition, I recognize the role that variety, moderation, and balance play in a healthy diet. The current WIC package does not contribute to these important features as much as it could.

Furthermore, the entire WIC program could be an incredible asset to the overall health and well-being of women and children in this country, helping families to establish healthy eating habits – a key to preventing obesity, diabetes and heart disease. When compared to similar programs in other countries, the potential of the WIC program is incredible. Updating the food package to better meet the nutritional needs of those it serves is the least WIC should do.

I support the NWA positions on the USDA proposal to revise the WIC food package and urge USDA to finalize the rule with revisions as suggested by NWA as soon as possible.

Tracie Gillespie  
56 Roland Street  
Boston, MA 02129

HP-267

From: Erin Francfort [franerin@isu.edu]  
Sent: Friday, October 13, 2006 12:18 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, Wic Food Packages Rule

I just wanted to add to the discussion regarding the new WIC food packages. As a registered dietitian and teacher of a university community nutrition class, I believe the new package would be beneficial to WIC clients. They are up-to-date with the latest dietary guidelines.

By including fresh fruits and vegetables it reinforces the idea of how important they are to our daily intakes. I believe it would encourage clients to keep consuming them after they are off the program and also to utilize their local farmer's markets.

Thank you for your consideration,  
Erin Francfort

HP-269

From: WebMaster@fns.usda.gov  
Sent: Friday, October 13, 2006 7:47 PM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: Karen Ambrecht  
EMAIL: kambrecht@co.shasta.ca.us  
CITY: Redding  
STATE: CA  
ORGANIZATION: Public Health  
CATEGORY: IndividualHlthProfessional  
OtherCategory:  
Date: October 13, 2006  
Time: 07:46:58 PM

COMMENTS:

As a health professional I was encouraged to see the IOM's recommendation to change the WIC food package. As this nation grows and changes so do programs need to grow and make changes. I am in favor of the new proposal of more whole grains, less juice, milk, cheese, and eggs. Adding fruits and vegetables and incorporating more whole grains just reinforces the message all health professionals are trying to get out to the public. Please change the food packages to reflect the IOM's recommendation. Thank you  
Karen Ambrecht, RD

HP-270

From: WebMaster@fns.usda.gov  
Sent: Saturday, October 14, 2006 8:27 AM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: sharon saka  
EMAIL: sharonsakard@hotmail.com  
CITY: suffern  
STATE: ny  
ORGANIZATION: Sharon Saka Associates Inc.  
CATEGORY: IndividualHlthProfessional  
OtherCategory:  
Date: October 14, 2006  
Time: 08:26:44 AM

COMMENTS:

Regarding Docket ID 0584-AD77, WIC Food Packages Rule- It is imperative for all women and children to be entitled to current nutritional trends. The guidelines need to be in line with the dietary guidelines for all americans. People with lesser means should not be penalized to receive lesser nutritional information.

HP-272

From: MR ROBERT W GUBALA [mgubala@sbcglobal.net]  
Sent: Saturday, October 14, 2006 7:13 PM  
To: WICHQ-SFPD  
Subject: food package revisions

To WIC,

I fully endorse the latest revisions in the WIC supplemental food packages. We need to show women how to eat more healthfully and offering a broader choice of foods shows sensitivity to culture and may help curb the trend to higher weight gain.

Sincerely, Judith A. Gubala R.N.,I.B.C.L.C.

HP-274

From: Michelle Scott [miscott@worldpath.net]  
Sent: Monday, October 16, 2006 6:48 AM  
To: WICHQ-WEB  
Subject: Docket ID # 0584-AD77 WIC Food Pkg

I hope you will consider the WIC Assoc recommendation to increase the breastfeeding mother's food package, and tighten the rules around providing supplemental formula. As a dietitian and lactation consultant in public health, I feel this is a small way to continue to support breastfeeding at WIC. The provision of formula makes it easy for mothers to think it is just as good as their breastmilk. More and more incentives to mothers will help emphasize breastmilk's importance.

Many other supports such as legislation for PAID maternity leave for all women for 3-6 months would cost a lot less than the illnesses, and child neglect which result from the promotion of bottle feeding.

I hope you will make these changes in the WIC food package.

Michelle Scott, MA, RD, IBCLC  
Wellspring Nutrition and Lactation Services  
632 Sand Pit Road  
Mason, NH 03048  
603 801-9140

HP-275

From: Gina D'Ottavio [Gina\_DOTtavio@GREATBROOK.ORG]  
Sent: Monday, October 16, 2006 1:40 PM  
To: WICHQ-WEB  
Subject: Chages in Food Items

To whom it may concern:

I am writing in support of the proposed changes to add fruits and vegetables, whole grains and lower fat dairy products to the foods distributed to low income families in need of assistance. I am a family physician working in a community health center in Massachusetts. I see first hand how lack of proper nutrition causes such problems as obesity and chronic constipation.

Thank you

Gina D'Ottavio. MD

HP-277

From: Mary Ecklund [mecklund@jcgchealthdept.org]

Sent: Monday, October 16, 2006 11:40 AM

To: WICHQ-SFPD

Subject: Food package revisions.

These much needed revisions will help to reinforce the information that we are trying to communicate to families each day. Please implement these revisions as soon as you can! .

MC Ecklund, MS, RD, LD

HP-278

From: WebMaster@fns.usda.gov  
Sent: Monday, October 16, 2006 4:10 PM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: Kimberly STewart  
EMAIL: 141 Campground Rd  
CITY: Ebensburg  
STATE: PA  
ORGANIZATION:  
CATEGORY: IndividualHlthProfessional  
OtherCategory:  
Date: October 16, 2006  
Time: 04:10:23 PM

COMMENTS:

I am in support of the revisions in the WIC Food Packages. The changes are necessary to ensure that the food packages will be consistent with the 2005 Dietary Guidelines for Americans and the current infant feeding practice guidelines of the American Academy of Pediatrics.

HP-279

From: Chris Biggar [biggarfish@adelphia.net]  
Sent: Monday, October 16, 2006 6:14 PM  
To: WICHQ-SFPD  
Subject: changes to WIC involving formula

I fully support the change indicated in your proposal to limit the amount of formula reimbursement and increase fruit and fresh vegetables for breastfeeding/partial breast feeding mothers. This is an important step to increase the number of breast feed babies. Thank you and good luck.

Mary Biggar RN

HP-280

From: WebMaster@fns.usda.gov  
Sent: Monday, October 16, 2006 7:06 PM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: Karen Norton  
EMAIL: Knorton@co.riverside.ca.us  
CITY: Moreno Valley  
STATE: CA  
ORGANIZATION: Riverside County Regional Medical Center  
CATEGORY: IndividualHlthProfessional  
OtherCategory:  
Date: October 16, 2006  
Time: 07:06:01 PM

COMMENTS:

When I heard that the WIC food packages were being revised, I thought great! Finally they'll delete the juice and increase the protein. I was so disappointed when I read the proposal.

In the US women are developing diabetes at an alarming rate. Many are WIC participants. Current guidelines for GDM are to increase protein intakes along with decreasing CHO intakes. These patients are instructed to totally avoid juice intake, and strictly limit cereal and beans. They need to increase protein intake, which would include eggs, low-fat cheese, and canned fish. The proposals for the new food packages directly contradict these guidelines. I do believe that the proposal for fresh fruits and vegetables is a step in the right direction.

I hope that the current proposal to eliminate and/or decrease eggs, cheese, and canned fish for pregnant women is reconsidered. Or, develop a category specifically for pregnant women with diabetes.

HP-281

From: Trudee Nims [nimstk@charter.net]  
Sent: Tuesday, October 24, 2006 6:18 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77 WIC Food Packages Rule

Registered Dietitian, Walla Walla General Hospital

Walla Walla WA

I strongly agree with the proposition to eliminate fruit juice for infants and would encourage the elimination of all fruit juices for all participants, regardless of age, in favor of more assistance with the purchase of whole fruits and vegetables. While I know that few Americans (even those that are from low-income families) are deficient in protein intake, I am opposed to the reduction in amounts of cheese and eggs. For those who are unable to drink fluid milk, cheese becomes an important source of calcium. Yogurt could fill this requirement, but cheese would provide an additional option. Regarding the high saturated fat and cholesterol content of cheese, skim milk or reduced fat cheese could be specified. Sadly, eggs are seriously maligned. They provide an inexpensive, easily prepared source of protein. I would not want to see a reduction in the amount of eggs provided.

HP-282

From: Angela Jones [JonesAng@einstein.edu]  
Sent: Monday, November 06, 2006 9:29 AM  
To: WICHQ-WEB  
Subject: support for recent WIC changes

Dear Patricia Daniels--

I am writing in support of recent changes to WIC provisions. As a psychologist employed by a hospital in an urban area, I see firsthand the positive impact of WIC on the families and children we serve.

Many minority children do not tolerate milk and dairy products and need an alternative. Others are struggling with weight and do not need juice but could use the fiber found in fresh fruits and vegetables.

The changes addressing these issues are among the most important and I am delighted to see such changes. Because of the strong relationship between good nutrition and optimal cognitive development, I believe that these changes will directly benefit the quality of life of many children.

Sincerely,

Angela F Jones, PhD  
PA Licensed Psychologist  
PA Certified School Psychologist  
Albert Einstein Medical Center  
Philadelphia, PA

HP-283

From: Irma Burda [IBURDA@swmail.sw.org]  
Sent: Monday, November 06, 2006 2:06 PM  
To: WICHQ-WEB  
Subject: Please include in revision of package

Dear Madam/Sir:

Evidence-based practice supports the recommendation by the Institute of Medicine for fruits and vegetables, whole grains and soy products in the WIC food packages. Please consider the above in the future revision of these packages. The health of a significant percentage of the country's population is at stake.

Thank you,  
Irma Burda, MS, RD, CNSD

Irma Burda, MS, RD  
Nutrition Support Dietitian  
Gastroenterology  
Scott & White Hospital  
Ph: 254-724-8204/Pager 3396

HP-284

From: Gladys Mason [Gladys.Mason@ncmail.net]  
Sent: Monday, November 06, 2006 2:47 PM  
To: WICHQ-WEB  
Subject: New WIC Program Food Packages

As a retired local agency WIC director, registered dietitian and board certified lactation consultant who has worked in public health and the WIC Program for over 27 years, I applaud USDA on the new, carefully developed, food package proposals. I especially appreciate that the infant food packages eliminates early introduction of cereals and eliminates juices altogether, replacing the juices with fruits and vegetables, and adding meats for the breastfeeding infants. An important change is the postponement of artificial baby milk (ABM) for breastfed infants until one month of age (except for medical necessity) since evidence based research shows that early availability of ABM can sabotage breastfeeding, causing mothers fail at breastfeeding.

Sincerely,  
Gladys Mason MS RD IBCLC

HP-285

From: bbarratt [bbarratt@bellsouth.net]

Sent: Monday, November 06, 2006 4:15 PM

To: WICHQ-WEB

Subject: \"Docket ID Number 0584-AD77, WIC Food Packages Rule,\"

Please consider the addition of fruit, vegetables, whole grains and soy foods to the WIC packages as encouraged by the Institute of Medicine. As a registered dietitian, I know of the importance of WIC and want it to be the best it can be to keep children healthy.

Thank you.

Denise Barratt MS, RD, LDN

HP-286

From: Andra Fertig [afertig@optonline.net]  
Sent: Thursday, October 19, 2006 2:34 PM  
To: WICHQ-WEB  
Subject: WIC reforms

I am a pediatrician who works in a city hospital in Manhattan. Most of my patients receive WIC and most of my patients are obese. Please eliminate all juice from your program. Cereals should be only low fat, low sugar and whole grain, bread should only be whole grain. Milk should only be low fat. There should be vouchers for fresh fruit and vegetables and for salads in packages (without croutons or dressings).

Thank you, Andra Fertig, M.D.

HP-287

From: Amara Minnis [amaraminnis@yahoo.com]  
Sent: Monday, October 16, 2006 7:15 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

I just wanted to take a moment to applaud you in your efforts to promote breastfeeding. I was so excited to hear of your proposed changes to the current WIC plan, discontinuing formula samples in the newborn packages. It's simple changes like these that can make the most significant difference in encouraging new mothers to breastfeed their babies.

Thanks again for your efforts to help new mothers breastfeed!

Sincerely,  
Amara Minnis, CD(DONA)  
Birth Doula

Amara Minnis, CD(DONA)  
Birth Doula  
Helping women have informed, supported births  
4103 Thistle Circle, Virginia Beach, VA 23462  
(h): 757-467-3294; (c): 757-375-0939

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**JAVICAN PEDIATRIC ASSOCIATES**  
166 EAST 87TH STREET  
BROOKLYN, N.Y. 11208-2808  
(718) 487-3991  
(718) 955-8728

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WINSTON S. PRICE, M.D.

**"Docket ID Number 0584-AD77, WIC Food Packages Rule,"**

**06 November 2006**

**Department of Agriculture  
Food and Nutrition Service**

**Dear Sir:**

**I am the Chair of the Pediatric Section of the National Medical Association and would like to comment on the Proposed Rule for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages - Proposed Rule.**

**The NMA represents the concerns of more than 30,000 physicians primarily of African American descent and millions of consumers, many of whom are high risk for nutritional deficiencies. In particular, many of the women, infants and children that the WIC program was initiated for, more than 10 years ago, are our patients. The proposed rule certainly addresses many issues and your staff should be commended for making these significant changes, the first since the inception of the program. However, the many changes have left some significant gaps in nutritional soundness based on the Institute of Medicine (IOM) and (DGA) recommendations to name a few. The 2005 DGA recommended that most people increase consumption of low-fat and non-fat dairy, and the milk group supplies several of the DGA's "nutrients of concern," which are low in most Americans' diet and alarmingly so in the African American diet. The National Medical Association's "Consensus Report on Dairy in the African American Diet", the American Academy of Pediatrics "Reports on Bone Health" similarly recommend the adequate intake of low fat dairy (or lactose free dairy) to improve calcium and dairy nutrient intake. The dairy intake and subsequent daily calcium intake is at or below 50% of the recommended level for African Americans.**

**The NMA in particular is concerned that the proposed rule has a serious and glaring flaw in allowing soy to be voluntarily substituted by mothers without healthcare team recommendations. There is no supporting documentation in the current literature that warrants an arbitrary substitution by a parent without concomitant assessment and recommendation by a dietician or physician who has weighed the impact on the overall nutritional intake of the child or mother. Indeed, the adequate calcium, magnesium and protein intake of individuals would be**

seriously at risk if this recommendation in the WIC rule were allowed. While USDA proposes allowing soy beverage to substitute for milk without limit in women's packages, and would allow tofu to substitute for up to 4 quarts of milk in these packages at a ratio of 1 pound for 1 quart, it does not implement an IOM recommendation to allow women to receive up to 4 quarts of yogurt each month (6 quarts for breastfeeding women) as a quart for quart substitution for milk and the USDA is not clear about how reduced lactose milk – among the first choices, according to the DGA and the AAP, for those who cannot drink milk due to lactose intolerance – fits into the proposed rule.

Similarly, the lack of yogurt as an option for those children and mothers who require a reduced lactose intake would impact on their ability to meet their critical calcium needs at such a formative time in their bone growth. The rationale that this would keep the cost neutral with all of the other proposed changes in the WIC Rule is penny wise and pound foolish as it subjects this at risk group (and the already budget strapped health system) to the costly expense of fracture care, osteoporosis treatment, dental disease referral and cardiovascular disease management resultant from the already inadequate calcium intake level in this population. Yogurt is an excellent source of calcium and protein, and a good source of potassium; some yogurt contains vitamin D. As recommended by the IOM, permitting women to partially substitute yogurt for milk would provide access to a nutrient-rich dairy food that is well-tolerated by those who are sensitive to lactose and fits into a variety of food patterns.

The proposed rule for Package II allows fully breast fed infants from 6-12 months the benefit of 77.5 ounces of baby food meat but does not address this source of food for partially breast fed or formula fed infants. They too would benefit from this protein and iron rich food source.

The indication for up to 30 ounces of canned fish in Packages III and VII does not mention the issue of the often times high mercury content in those products. There has been a concerted effort from several fronts to eliminate all sources that could potentially lead to elevated bodily levels of this known toxin.

We fully understand the complexity of the changes and welcome many of them as timely and forward thinking but hope that the new rule will be modified to take into account the sound science and recommendations of the IOM, DGA, NMA, ADA, AAFP, Surgeon General ("Report on Bone Health"), and the AAP with regard to the importance of dairy as a pivotal and crucial component of good healthy eating for women, infants and children.

Sincerely,



Winston Price, MD, FAAP  
Chair, Pediatric Section



HP-300

From: margaretmccann@att.net  
Sent: Thursday, October 26, 2006 10:59 PM  
To: WICHQ-SFPD  
Cc: margaretmccann@att.net  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

Dear Ms. Daniels,

I write to you as both an Episcopalian who is concerned about care for the poor and the hungry, and as an epidemiologist who has done research on the WIC program. This program is so critical to poor families.

I am pleased that WIC is proposing changes in the food packages that will bring these offerings more into line with current best-practices in nutrition of infants, children and mothers.

Thank you.

Sincerely,

Margaret McCann  
105 Wisteria Dr.  
Chapel Hill, NC 27514

HP-313



November 6, 2006

Patricia N. Daniels  
 Director  
 Supplemental Food Programs Division  
 Food and Nutrition Service, U.S. Department of Agriculture  
 3101 Park Center Drive, Room 528  
 Alexandria, VA 22302

RE: Docket ID Number 0584-AD77, WIC Food Packages Rule

Dear Ms. Daniels:

On behalf of the certified nurse-midwife (CNM) and certified midwife (CM) members of the American College of Nurse-Midwives (ACNM), I am writing to express strong support for the WIC Food Packages Proposed Rule. We applaud the U.S. Department of Agriculture (USDA) for the excellent job it is doing to update and strengthen the WIC food packages to better align them with the U.S. Department of Health and Human Services' *Dietary Guidelines for Americans 2005* and to emphasize the importance of breastfeeding for early childhood development.

Specifically, ACNM strongly supports USDA's proposed revisions to the WIC food packages to provide greater incentive for women to breastfeed. ACNM understands that under the proposed regulations, mothers would be required to identify whether they plan to breastfeed their child. A woman choosing to breastfeed would no longer receive formula as a component of the WIC food package. In its place, the USDA plans to supplement the food package with vouchers for other items including fruits and vegetables. Women who do not wish to breastfeed will have access to needed formula, but will not enjoy additional benefits.

ACNM fully supports USDA's plans to incentivize breastfeeding by supplementing the food package for full breastfeeding and partial breastfeeding women. In addition to providing positive reinforcement to breastfeeding mothers, this policy recognizes the additional nutritional needs of the woman while breastfeeding. ACNM believes that access to breastfeeding counseling and support services, and provision of other breastfeeding devices and supplies is critical to foster success for breastfeeding

mothers. ACNM appreciates the WIC programs attention to the specific needs of mothers who are initiating and establishing breastfeeding.

ACNM promotes breastfeeding as the optimal method of infant feeding. Breastfeeding soon after birth may reduce the risk of maternal blood loss and enhance maternal infant bonding. Exclusive breastfeeding for the first six months provides complete nutrition for growth and development, and ideally breastfeeding should continue throughout the first year of life. Breast milk contains specific immunological factors that cannot be duplicated in commercially prepared formulas, and which have been shown to enhance the infant's immune response and to reduce the incidence of infectious diseases. In addition, breastfeeding has been shown to decrease the risk of obesity, asthma, celiac disease, inflammatory bowel disease and types I and II Diabetes later in childhood.

The ACNM recognizes that breastfeeding is a combination of learned and instinctive behaviors of both mother and infant, and that the choice to breastfeed is affected by sociocultural factors, including attitudes of health care providers. Therefore, the ACNM has long encouraged comprehensive health education and social marketing efforts to inform and educate the public, health care providers and clients about breastfeeding as a normal process and the preferred method of infant feeding. Counseling and support for breastfeeding mothers is also critically important.

Another essential change that ACNM greets with enthusiasm is the proposal to increase access to fruits and vegetables in WIC food packages. We strongly support regular cost of living adjustments to the fruit and vegetable benefit to ensure that its value does not diminish over time.

Overall, ACNM strongly supports USDA's proposed rule for updating the WIC food packages. The changes we have highlighted and the other dietary changes that have been proposed will better support WIC participants' efforts to sustain a healthy diet for themselves and their children. For further information on this matter, please contact Mr. Patrick Cooney, ACNM's Federal Representative, at [Patrick@federalgrp.com](mailto:Patrick@federalgrp.com) or at (202) 347-0020.

Sincerely,



Katherine Camacho Carr, CNM, PhD, FACNM  
President, ACNM

From: jessica s. [pyro\_clastic@hotmail.com]  
Sent: Monday, November 06, 2006 12:08 PM  
To: WICHQ-SFPD  
Subject: Regarding Changes in WIC benefits

Dear USDA,

I am writing regarding the changes you are considering regarding WIC benefits and access to local farm produce. I am writing specifically to ask that you do no harm to the WIC Farmers Market Nutrition Program (FMNP). Please do not reduce FMNP funding or establish procedures that would adversely affect its operation or effectiveness.

Low income mothers and children need access to fresh, healthy food if we are to avoid the looming health crisis that threatens to bankrupt this nation in 50 years when the generations of fast-food and high fructose corn syrup consumers begin to suffer the health consequences of a lifetime of unhealthy diets, including increased rates of diabetes and coronary heart disease.

Therefore, I strongly support the provisions that makes farmers markets eligible WIC vendors.

Where states or tribes currently operate WIC FMNPs, please allow state and tribal agencies to coordinate the implementation and coordination of the new fruit and vegetable program with the WIC FMNP.

I want farmer's markets to be allowed to participate in the WIC program as seasonal vendors.

There should be no limit placed on the type of fresh fruits and vegetables that may be purchased with the new fruit and vegetable coupons.

I want to ensure that WIC recipients are able to continue to shop at farmers' markets, and that your local farmers continue to benefit from the sales they make to WIC customers.

Thank you.

Sincerely,  
Dr. Jessica A. Seares

Emory University

Dept of Environmental Studies

**HP-319**

email to wichq-sfpd 11-06-06 from Rosenblum, Mark [MRosenbl@med.miami.edu]

November 6, 2006

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service  
USDA  
3101 Park Center Drive  
Room 528  
Alexandria, VA 22302

RE: "Docket ID Number 0584-AD77, WIC Food Packages Rule"

Dear Ms. Daniels:

The University of Miami WIC Project enthusiastically supports the USDA issued proposed rule governing the WIC Food Packages published in the Federal Register on August 7, 2006, with the following modifications.

Infant feeding category – Birth through one month

I applaud policies that will increase breastfeeding in our WIC babies.

The concept that early exposure to formula for breastfed babies has a negative impact on frequency and duration is very well documented. I also agree that the market value of formula makes its availability through WIC very appealing. Providing the mother an incentive to eliminate or decrease the use of WIC formula through compensation that equals, or better yet, exceeds the value of the formula, makes a lot of sense.

Through education, significant public service campaigns, community awareness, elimination of free formula in newborn nurseries, and other breastfeeding promotion strategies, I am looking forward to the time when formula feeding is very unusual. This will happen when WIC mothers intrinsically understand that the value of breastfeeding will always exceed formula. We are not there yet.

The proposed model – no formula for exclusive or partially breastfed infants in the first month of life – fails to provide sufficient compensation to motivate women to forego formula. There is a high risk women will quickly figure out how to circumvent this policy by claiming they are no longer partially or exclusively breastfeeding. Because non-breastfeeders receive the most economic benefit from WIC, this proposal may actually contribute to a decrease or termination of breastfeeding.

The proposal is also insensitive to the different degrees of partial breastfeeding. For example, many mothers report breastfeeding only when the baby wakes up at night, while others just substitute one or two feedings with formula. WIC's definition of partial breastfeeding is too broad for a one size fits all policy.

My suggested amendments to this proposal are:

- \* Offer no formula to all WIC infants in the first month, regardless of breastfeeding status, unless there is medical documentation contraindicating breastfeeding. This will eliminate the economic incentive to receive formula. I believe this proposal would have the greatest impact on significantly increasing breastfeeding frequency and duration over the long term.

- \* If the WIC community is not ready to adopt the above proposal, then eliminate the infant feeding category "birth through one month" and replace with the "two through 5 months" package starting at birth. This will enhance sustained breastfeeding by its sensitivity to the needs of WIC mothers and their newborns.

Waive the requirement for medical documentation when the WIC registered or licensed dietitian/nutritionist determines a client needs cheese in excess of the maximum substitution rate.

- \* The State agency can develop guidelines for exceeding the maximum substitution rates. WIC registered or licensed dietitians/nutritionists are best qualified to determine if extra cheese is warranted in select cases. Requiring medical documentation has no foundation and will waste time in an already burdened health care system. WIC risks loss of credibility from the medical community if required to write prescriptions for cheese.

Establish an alternative minimum nutrient standard for soy beverages.

- \* Currently, there are no calcium-fortified soy beverages in the marketplace that meet the proposed nutrient standard of 8grams of protein and 349 milligrams of potassium per 8 ounce serving. I recommend that the specifications for protein and potassium in calcium-fortified soy beverages follow the FDA and industry standards for protein at 6.25 grams minimum and for potassium at 250 milligrams per 8 ounce serving. Since protein is no longer a priority nutrient and the addition of fruits and vegetable contribute to the food packages' potassium content, this adjusted specification will not affect the nutritional needs of participants who substitute soy beverages for cow's milk.

Waive the medical documentation requirement for soy milk and tofu.

- \* The primary reason these products will be requested is cultural/personal preference. WIC registered or licensed dietitians/nutritionists are best qualified to determine if these foods are applicable when a client reports intolerance to cow's milk. Their replacement of milk or cheese has negligible impact on the quality of the WIC food package. These products are not medical foods and do not require prescriptions for purchase by the general population. It is therefore unfair to place obstacles to their purchase by WIC

clients. Requiring medical documentation will waste time in an already burdened health care system. WIC risks loss of credibility from the medical community if required to write prescriptions for soy milk or tofu.

#### Whole Grains and Whole Grain Breakfast Cereals

\* Maintain the proposed criteria for breakfast cereals (iron, sugar and whole grain) and allow States the flexibility to make appropriate substitutions to accommodate individual participant needs based on a documented medical condition. The proposed criteria for whole grain breakfast cereals eliminate single-grain corn and rice cereals from the eligible list of cereals. Participants with special conditions, such as allergy to wheat or gluten-intolerant, will be limited in breakfast cereal choices. NWA recommends that in cases when a participant presents with a medical diagnosis warranting a "wheat-free" cereal, that a special package be issued that includes cereals that meet the iron and sugar criteria.

#### Fruits and Vegetables

\* I support cost neutrality and understand its challenges. The inclusion of fruits and vegetables in the WIC food package represents a significant health benefit for WIC clients. I am requesting that USDA partner with the WIC community to strongly advocate for additional funding, so there can be full implementation of the IOM recommendation of \$10 cash-value instruments for all women and \$8 for children.

#### Reduced Fat Milk

\* The American Academy of Pediatrics and the American Heart Association support 1% or fat free milk starting at 2 years of age. The proposal allows up to 2% milk in children 2 years and older. As I understand, States can institute a limit of 1% or fat free milk at two years of age. If this is not the case, and states have to offer the 2% option, then I support elimination of the 2% milk option for children 2 years and older.

#### Support state proposals for implementation

\* I am requesting your support for state agency proposals that represent efficient and effective implementation of the food package proposals.

Sincerely,

Mark H. Rosenblum, MBA, MPH, RD, LD  
Adjunct Assistant Professor, University of Miami Miller School of Medicine  
Director, University of Miami WIC Project

HP-329



**American Dietetic Association**

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**Headquarters**

120 South Riverside Plaza, Suite 2000  
Chicago, Illinois 60606-6995  
312/899-0040 800/877-1600

**Washington, D.C. Office**

1120 Connecticut Avenue N.W., Suite 480  
Washington, DC 20036-3989  
202/775-8277 800/877-0877

November 6, 2006

Patricia Daniels, Director  
Supplemental Food Program Director  
FNS, USDA  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

**RE: Comments on RIN 0584-AD77, Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages.**

Dear Ms. Daniels:

The American Dietetic Association (ADA) appreciates this opportunity to submit comments to the United States Department of Agriculture (USDA) on its proposed rules to modernize the WIC food package to better meet the nutrition and health needs of the country's vulnerable citizens — mothers and children. ADA is the largest association of Registered Dietitians (RDs) and other food and nutrition professionals in the United States, with a membership exceeding 65,000. ADA serves the public by promoting optimal nutrition, health and well-being using information based on sound science. Thousands of our members refer patients to obtain services from the WIC program and thousands more of our members are WIC employees themselves.

**General Comments**

The proposed revisions to the WIC food package represents the most significant change to the food packages in over 30 years and will do much to improve the nutritional health of all WIC recipients. For the following reasons, the American Dietetic Association supports the recommended food packages:

- Provides greater consistency with the 2005 *Dietary Guidelines for Americans*,
- Addresses current public health concerns, including obesity and other diet-related chronic conditions,
- Provides foods with the nutrients identified to be of concern for the specific populations served by the WIC program,
- Reinforces nutrition education messages,
- Allows for an increasingly diverse population and better meets their nutritional needs within the bounds of appropriate cultural considerations, and
- Addresses changes in the food supply and dietary patterns.

The proposed WIC food packages will help mothers and children establish dietary patterns that promote better food habits and establish dietary patterns compatible with health. These packages add fruits, vegetables, and whole grain bread and cereal products; decrease saturated fat and cholesterol; and provide options to milk, meats and legumes consistent with the *Dietary Guidelines for Americans*. They largely reflect the Institute of Medicine (IOM) recommendations in *WIC Food Packages: Time for a Change*. ADA commends the USDA for designing and proposing food packages that address the today's health concerns by providing less saturated fat, less cholesterol, more fiber and other vitamins and minerals than the current food package.

### **Specific Recommendations**

ADA acknowledges that WIC food packages are not intended to provide the entirety of an individual's complete nutritional needs, but instead they are meant to enhance an individual's diet in a way that lessens the risk of either a nutrient deficiency or excess. Thus, WIC offerings increase the likelihood of women and children of achieving optimal nutrition. With these concepts and principles in mind, ADA makes the following specific comments.

Fruit and Vegetable Benefit. ADA urges that USDA demonstrate full adherence to the IOM recommendation for fruits and vegetables by providing the full cash-value voucher amounts for fruits and vegetables for WIC mothers and children: \$10 and \$8 per month respectively.

ADA urges the USDA to seek full-funding from Congress to appropriate the additional \$2 per month for fruits and vegetables for WIC participants receiving Packages IV, V, VI and VII, as recommended by the IOM. If immediate implementation is not possible, we support providing the full cash-value voucher for breastfeeding mothers as an additional incentive, with a phase in for the remaining food packages.

Infants (Food Package I). ADA agrees with the proposed changes for Food Package I, particularly the introduction of complimentary foods at six months and elimination of juice. ADA supports measures that encourage breastfeeding, but we have concerns about the proposal that infants under one month of age will be recognized as either exclusively fully breastfed or fully formula-fed. We simply do not know whether the promise of a more generous food package will be a sufficient inducement for a mother to choose to breastfeed. The USDA has acknowledged this concern and has proposed a pilot test to measure whether this option will indeed have the desired effect of enhancing the rate of breastfeeding.

While ADA prefers that policy decisions be fully informed by scientific data, the proposed rule raises several other questions related to the conduct of the pilot test. For example, what will be the food package choices for newborns that do not participate in the pilot test? Will provision be made for obtaining a can of powdered formula at any time from WIC during the first month for the fully breast-fed infant? Also, what is the specific timeline for the pilot test, including analysis of the data, and how will the study results affect implementation of the all or none recognition of a breastfed infant?

An alternative is to have states apply to be part of the pilot program, ensuring that there are appropriate data for collection and for clearly differentiating the characteristics of those participants choosing the new package options. USDA should commit to a timely evaluation of the impact of the new package on a mother's decision to breastfeed which will allow USDA to utilize the findings to determine an appropriate future course of action.

Milk and substitutes. ADA believes that the milk amounts recommended for Food Packages IV through VII are consistent with the 2005 *Dietary Guidelines for Americans* and reflect IOM recommendations, and are appropriate for a supplemental feeding program. ADA is pleased that FNS has proposed adding substitutions for milk, and urges reconsideration of the IOM recommendation to offer yogurt as a substitute for at least Food Package VII, and possibly V.

In addition, ADA recommends that USDA waive the medical documentation requirement for children to receive soy beverages. The consumption of soy beverage for children can be a cultural/personal preference as well as a medical necessity. Children who already have consumed soy-based formula throughout the first year of life should not require a new prescription for fortified soy-based beverage.

A request for milk substitution with a soy-based beverage should trigger a nutritional reassessment by the competent professional authority to determine if the child is already at nutritional risk rather than a trigger for medical documentation. If the substitution is merited, the competent professional authority as defined by 7 CFR 246.2 should be authorized to alert the child's physician or other designated health professional responsible for the participant's medical care, instead of requiring a prescription from that physician or designated assistant.

Fortified soy beverages that meet industry standards should be allowed in the WIC food packages. Requiring higher levels of protein and potassium are not necessary as protein is no longer a priority nutrient and the inclusion of fruits and vegetables contributes to the food packages' potassium content.

ADA also supports the maximum fat content of 2% fat milk for Food Packages V through VII, but questions the implications of requiring households with a child between 1 - 1.9 years to purchase a carton of whole milk. The new rule may complicate purchasing, storage and serving practices for two different kinds of milk. ADA asks FNS to consider lowering the required minimum fat content in milk to 2% for children 1.0 to 1.9 years, without medical documentation. Children of this age can safely meet calorie and fat needs with 2% milk. The American Heart Association recently released *Dietary Recommendations for Children* that included food patterns for 1-year-olds based on inclusion of 2% milk.<sup>1</sup> These recommendations have been endorsed by the American Academy of Pediatrics.

Implementation. The ADA supports prompt implementation of the new WIC packages, with publication and implementation of the final rules by spring 2007. We understand that a year-long transition period is proposed to fully implement all program components, including staff education and training. ADA is concerned about the proposed length of time for the pilot study to investigate the impact of requiring either a breastfeeding or formula-fed designation during the first month of life. ADA believes that a three-year delay is too long before making a decision. As noted earlier, we have concerns about those WIC participants not covered under the pilot study.

Categorical Tailoring and Substitution Requests. ADA is concerned about the proposal to remove the state option to categorically tailor or propose food substitutions. There are rapid changes in food industry, science, demographics and other factors in today's environment, and state agencies will need to submit proposals for cultural accommodations or categorical tailoring

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<sup>1</sup> American Heart Association. *Dietary Recommendations for Children and Adolescents*. Pediatrics; 117:544-559; February 2006.

in the future. Federal changes to the WIC food packages require a tremendous amount of time and resources, and thus are typically not able to quickly respond to state needs. It is essential that states be allowed the ability to revise food lists, within the categorical maxima defined in the proposed rule, to keep pace with the needs of their participants.

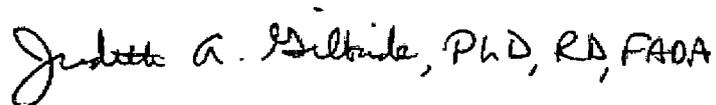
**Conclusion**

ADA has carefully reviewed the proposed rules published on August 7, 2006 (71 FR 44784) and believes that the USDA Food and Nutrition Service has generally accomplished its task in creating proposed WIC food packages that will positively contribute to participant long-term nutritional health.

The thousands of registered dietitians that work as WIC nutritionists, providing education to women and children at WIC clinics throughout the country, stand ready to help WIC recipients maximize their health and their families' health under the proposed guidelines.

Questions about this letter and requests for additional information should be directed to Mary H. Hager, PhD, RD, FADA, Senior Manager of Regulatory Affairs, at 202-775-8277, ext. 6007 or mhager@eatright.org.

Sincerely,



Judith Gilbride, PhD, RD, CDN, FADA  
President  
American Dietetic Association

HP-330

From: Jennifer.L.Bass@kp.org  
Sent: Wednesday, October 18, 2006 4:50 PM  
To: WICHQ-SFPD  
Subject: docket ID 0584-AD77, WIC food packages rule

To: Whom it may concern

I am writing in support of the proposed changes to the WIC food packages. As a pediatrician who worked in the inner city for approximately 11 years, I know the importance of the WIC foods for children and families. I also am quite familiar with the obesity epidemic in children that has developed particularly for children living in poverty.

By supplying particular foods, WIC validates their importance, and families get the message that these foods may be more important than other foods. It is time for WIC to include fruits and vegetables. I also think the "free formula" is a disincentive to breastfeed, and the changes to wait until after 1 month to add supplements is an excellent idea.

I am very excited that the WIC program is considering change. This, along with many other policy and community interventions, will aid in the fight against childhood obesity and improve the health of our children and our future.

Thank you,

Jennifer Bass, MD  
Adjunct Assistant Professor of Pediatrics  
Kaiser Permanente, Northwest Region  
Oregon Health Sciences University  
East Interstate Medical Office  
3550 North Interstate Ave  
Portland, OR 97227  
503-331-5217

HP-333

From: Burke, Nicole [NBurke@buttecounty.net]  
Sent: Thursday, October 19, 2006 1:13 PM  
To: WICHQ-SFPD  
Subject: docket ID # 0584-AD77, WIC food packages rull

So thrilled to see that these changes are being made to the WIC packaging benefits. This population is in dire need of the health benefits associated with good nutrition. These changes will only improve the overall health of the participant and educate proper nutrition through WIC providing a good model in their food appropriations. As healthcare advocates, we need to pass along new found information re: nutrition and continue to keep things current. The health of these families depend on it. Thank you for the continued efforts improving this program.

Nikki Burke BS, RDH

Children's Dental Project

Butte County Public Health/CHDP

HP-334

From: Palfrey, Sean [Sean.Palfrey@bmc.org]  
Sent: Thursday, October 19, 2006 9:54 AM  
To: WICHQ-SFPD  
Cc: Palfrey, Sean (E-mail)  
Subject: Docket ID # 0584-AD77, WIC Food Packages Rule

These proposed changes are excellent, and I support them very strongly. It is great that you have decided to improve the nutrition of the packages. Please promulgate them.

Sean Palfrey, M.D.  
Prof of Pediatrics and Public Health  
Boston Medical Center, BU, and American Academy of Pediatrics

Website: <http://www.palfrey.com>

HP-336

10-29-06 email from Ronit [rgourarie@comcast.net]

October 29, 2006

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service  
United State Department of Agriculture  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

RE: Docket ID Number 0584-AD77, WIC Food Packages Rule

Dear Ms. Daniels:

I, Ronit Gourarie of Kirkland, Washington, strongly and enthusiastically support the USDA issued proposed rule governing the WIC Food Packages published in the Federal Register on August 7, 2006.

The intent of the revised regulations is to improve the nutritional health of all WIC participants. The revisions are grounded in sound science, aligned with the *2005 Dietary Guidelines for Americans*, support the current infant feeding practice guidelines of the American Academy of Pediatrics and support the establishment of successful long-term breastfeeding. The proposed food packages provide WIC participants with a wider variety of food choices, allow state agencies greater flexibility in offering food packages that accommodate participants' cultural food preferences and address the nutritional needs of our nation's most vulnerable women, infants and children.

The proposed rule reflects recommendations made by the Institute of Medicine (IOM) of the National Academies in its report, "WIC Food Packages: Time for a Change." It follows the advice of the Institute, which stated that the WIC Program needs to respond to changes in nutrition science, demographics, technology, and the emerging health concerns in the WIC community. The changes in the proposed rule are consistent with nutrition education promoting healthier lifestyles and food selections to reduce the risk for chronic diseases and to improve the overall health of WIC's diverse population. The Department's aim is to add new foods while preserving cost neutrality. To cover the cost of the new foods, WIC will pay for less juice, eggs and milk that have been staples of this extremely successful public health nutrition program, which helps feed more than half the infants born in the United States. While there is some disappointment over the Department's decision to pay for fewer fruits and vegetables than recommended by the IOM, I believe that WIC clients will be pleased that there will be more choices in the foods offered.

The proposed rule aims to support breastfeeding for the first six months and continued breastfeeding, with appropriate complementary foods, until the infant's first birthday. I *do not support* the recommendation to pilot test the food package for the partially breastfeeding woman. With a delay in implementation of this package, I believe that many women will simply choose to formula feed. We recommend that the fully breastfeeding, partially breastfeeding and fully formula feeding woman's food package changes be implemented concurrently.

I would also suggest that States be given the option to provide the breastfeeding infant, in the first month, with 1) no formula, or 2) one can of powdered formula as recommended in the IOM Report. States would incorporate their option into their existing breastfeeding policies and procedures.

The proposed rule provides for complementary infant food fruits and vegetables at six (6) months of age in varying amounts for those infants who are fully breastfeeding, partially breastfeeding or fully formula feeding as well as infant food meats for fully breastfeeding infants. Children and women participants will also benefit from the addition of fruits and vegetables through "cash-value" vouchers to purchase fresh and processed fruits and vegetables in the proposed amounts of \$8 for women and \$6 for children. I urge that the dollar amount provided to the fully breastfeeding woman be increased to \$10 to match the IOM recommendation. This would provide further incentive and support for breastfeeding.

The food package recommendations support scientific research findings, which suggest that increasing fruits and vegetables is associated with reduced risk for obesity and chronic diseases such as cancer, stroke, cardiovascular disease, and type 2 diabetes. Fruits and vegetables added to the diet also promote adequate intake of priority nutrients such as Vitamins A, C, folate, potassium and fiber.

I strongly recommend that the dollar denomination of the fruit and vegetable cash-value vouchers and the minimum vendor stocking requirements for fruits and vegetables be determined at the discretion of the WIC State agencies.

Additionally, I strongly encourages the purchase of U.S. grown fruits and vegetables with WIC checks.

State flexibility to promote produce selections that are locally accessible, culturally appropriate, affordable, and practical for various household situations - such as storage, preparation and cooking options - is paramount. Flexibility will give States the capability to partner with vendors to promote the maximum number and variety of produce items. Setting an arbitrary vendor stocking level at two as suggested in the proposed rule will not encourage State agencies or vendors to provide the wide variety of fruits and vegetables purchased by WIC consumers as demonstrated in the three highly successful pilot projects recently

conducted in California and New York. It is essential that State agencies determine the dollar value of the cash-value vouchers in partnership with vendors to assure appropriate redemption levels and to save already tight Nutrition Services dollars. Printing of multiple voucher instruments in small denominations is costly and counter productive.

The proposed food packages offer calcium-set tofu as well as calcium- and vitamin D-rich soy beverages as partial substitutions and alternatives for milk. These alternatives will prove to be particularly beneficial to those WIC participants who suffer the medical consequences of milk protein allergy, lactose maldigestion, and those with cultural preferences. Currently, there are no calcium-fortified soy-based beverages on the market that meet the proposed protein and potassium standards. Accordingly, I urge levels of 6.25 grams of protein and 250 milligrams of potassium per 8 ounce serving as alternative minimum standards in order for WIC women and children to be able to include soy. I also urge that children be able to receive soy products without the requirement of medical documentation.

The proposed rule to include whole grain bread and other grains for all children and pregnant and breastfeeding women is consistent with the *2005 Dietary Guidelines for Americans* which recommend that refined grains be replaced with whole grains. In order to accommodate the medical needs of certain participants, we support the IOM recommendation to allow States to make substitutions for "wheat-free" cereals based on a medical prescription and urge the Department to include such a provision in the final rule.

I recognize that implementing the proposed rule will require good planning and effective communication. Implementation strategies to maximize benefits at every level will need to be inclusive and carefully crafted to achieve success. There is great excitement and anticipation among State agencies regarding the promulgation of a final rule revising the WIC food packages and without exception. State agencies are looking forward to fully implementing the proposed rule. I recommend that USDA partner with State agencies and the National WIC Association to assure a reasonable and flexible implementation timeframe of at least one year from the date of publication of the final rule.

Again, I enthusiastically and strongly support the proposed rule. I am convinced that it will serve to minimize vendor stock requirements, reduce the administrative burden on States and local agencies, encourage the growth of Farmers' Markets, support participant choice, and most important, focus attention on chronic disease prevention and control.

The proposed food packages will provide greater amounts of all of the priority nutrients currently identified as needed by the WIC population. They will supply a reliable and culturally acceptable source of supplemental nutritious foods as well as promote and support exclusive breastfeeding. Equally important, the

proposals will provide WIC professionals with the necessary tools to reinforce the nutrition education messages and promote healthier food choices.

WIC is our nation's premier public health nutrition program. The long-term benefits of providing participants with fruits and vegetables, lower fat dairy products and whole grains, as well as additional incentives for fully breastfeeding women will greatly aid WIC in improving the life-long health of our most vulnerable women, infants and children.

Sincerely,

*Ronit Gourarie*

Ronit Gourarie, RN, MSN  
Kirkland, Washington

HP-337

From: Robert Karp [Robert.Karp@downstate.edu]  
Sent: Tuesday, October 31, 2006 10:09 AM  
Subject: comments on Wic

October 30, 2006

To National WIC Association

From Robert Karp, MD

Re Support for rule changes to the Women, Infants and Children (WIC) program

I write as Chair of the Nutrition Special Interest Group of the Ambulatory Pediatric Association. My work has been in the field of malnutrition and poverty among children in the United States. Some of my writings are listed below.

I support the changes in regulations. The nature of the foods to be provided, emphasizing foods that are rich in nutrients and fiber with less fat and sugar, is an effective way to begin life well nourished. Data from my own work in Brooklyn suggests that early rapid gain in weight is a precursor to obesity in later childhood and as adults. This letter addresses two phenomena, 1) How WIC works and 2) Why WIC is needed to decrease the prevalence of obesity.

#### 1. How WIC works

Supplemental food plans work in two ways. First, nutritious foods are provided and second, income savings permit purchase of higher quality items.

Consider a family of 5 requiring 10,000 calories per day. Working back from the \$17,000 per year poverty level income, \$56/day is allotted. One third (\$17) is allotted for food. Assume a worth of \$7 of food supplementation (WIC and school feeding). First, the foods provided are of a high nutritional value. This fact is emphasized with the new regulations. Second, the family is relieved of the responsibility of purchasing a substantial part of daily caloric need. If the family of five receives WIC for an infant and school feeding programs for two older children, the aggregate provision is of 4,000 calories. This leaves 6,000 calories to be purchased for the same \$17 a day and foods costing \$0.28/100 calories such as fresh fruits, vegetables, and lean meat can be purchased. This increases the nutrient value of the remaining part of the daily diet and equalizes intake to that of middle-income families.

## 2. Why WIC is needed to decrease the prevalence of obesity

It is a commonly held but quite false belief that the changing patterns of nutritional status with increasing income are

- 1) poverty/undernutrition -->
- 2) well child/normal nutritional status -->
- 3) overnutrition/ obesity.

You are likely to receive critiques of WIC based on this false premise.

In fact, as shown by Drs Meyers, Cheng and myself, children in poor populations (below the poverty level) are likely to have both specific nutrient (usually iron) and caloric undernutrition. Lack of discretionary income among the poor promotes purchase of those foods with highest energy content at lowest cost. Obesity follows. These foods tend to have inadequate micronutrient content, and specific nutrient deficiencies occur. Only with confidence in the availability of discretionary income does malnutrition disappear as a public health problem. WIC and other supplemental programs increase availability of income for nutritious food as well as provide nutritious food.

Here are the basic obesity vrs. Income statistics.

For families with income below ½ the poverty level, caloric undernutrition (growth retardation) continues to be found. At or below poverty level 12% of the child population is obese. For families living at the cusp of poverty (from

one to three x poverty level incomes), children tend to be obese –

a 24% obesity level. Only past 3 times the poverty level does the

obesity levels fall again to 12%. These children are well nourished.

(From Karp, Chang and Meyers)

Simply stated, children from poor families do not go through a set path as its income and knowledge increase from under nutrition --> good nutrition --> over nutrition. Rather, over nutrition follows undernutrition at the cusp of poverty and sufficiency when there is a lack of discretionary income and food insecurity. WIC is essential to provide nutritious food, establish food security and income sparing for purchase of better quality items.

Actual progression:

1. Lowest income children “at-risk” for both specific nutrient and protein energy deficiencies

2. At the cusp of poverty “at risk for both specific nutrient deficiencies and obesity
3. From 1 to 3 poverty level “at risk” for obesity with less micronutrient deficiency
4. With sufficient family income specific nutrient deficiency is unlikely and overweight obesity levels recede.

WIC makes a substantial contribution to both provision of nutritious food and food selection.

Thank you for your consideration

Robert Karp, MD

Professor of pediatrics

SUNY-Downstate Medical Center

Chair, Nutrition Special Interest Group of the Ambulatory Pediatric Association

#### Reference

Karp RJ. (1993 Problem of changing food habits 1: How food habits are formed (in) Karp, RJ (Ed) Malnourished Children in the United States: Caught in the Cycle of Poverty. Springer Publishing Co., New York.

Karp, RJ (1999 and 2005) Malnutrition among children in the United States. The impact of poverty. (in) Shils, ME, JA Olson, M Shike, and AC Ross. (eds) Modern Nutrition in Health and Disease, 9th edition (Chapter 60) and 10th edition (Chapter 55). Williams and Wilkins, Baltimore, MD. Pp 989-1001

Karp RJ, Cheng C, Meyers AF. (2005) The appearance of discretionary income: Influence on the prevalence of under- and overnutrition. International Journal of Health Inequities <<http://www.equityhealthj.com/content/4/1/10>>



EXTENSION FAMILY AND COMMUNITY DEVELOPMENT  
161 Milam Hall Corvallis, Oregon 97331-5106  
Tel: (541) 737-0997 Fax: (541) 737-0999  
<http://extension.oregonstate.edu/fcd>

Extension Service

HP-338

**10-31-06 email from Raab, Carolyn A [raabc@oregonstate.edu]**  
October 31, 2006

To: Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service

We are writing in support of aligning WIC food packages with the 2005 US Dietary Guidelines for Americans. WIC families sometimes participate in our Oregon State University Extension Service nutrition education programming for Food Stamp eligible adults and youth. It is important for these clientele to have access to the healthy foods that we promote. The added variety of the revised WIC food package will increase the options for eating a healthy diet.

The Dietary Guidelines and MyPyramid food guidance are the basis for our Extension educational messages. We're pleased that the proposed rule to revise the WIC food package will support our focus on increasing fruit and vegetable consumption by women, infants, and children. These healthy choices can help to prevent chronic illnesses and obesity which increase health care costs.

Much of our Extension educational programming reaches diverse low-income audiences. The inclusion of culturally appropriate food choices (such as tofu and soy beverage) in the proposed WIC food package revision increases the likelihood that healthy food choices will be made by all clientele.

Inclusion of canned fish such as salmon and sardines in the food package will promote consumption of calcium and omega-3 fatty acids which provide health benefits for WIC clientele. Like canned beans and legumes, these are healthy convenience foods that can be prepared quickly by busy families who sometimes have limited cooking skills.

The new whole grain options (such as whole wheat bread) in the proposed food package revision will also support the Dietary Guidelines and improve the quality of diets of low income women and their children.

The Oregon State University Extension Service is closely partnering with the Oregon WIC program. The proposed WIC food package revision will help us meet our mutual program goals (including increased consumption of fruits and vegetables by Oregonians).

State Nutrition Education Program Faculty  
Oregon State University Extension Service

Carolyn Raab, Ph.D., R.D.  
Extension Foods and Nutrition Specialist

Lauren Tobey, M.S., R.D.  
Nutrition Education Program Coordinator

Anne Hoisington, M.S., R.D.



**Extension Service**  
Extension Senior Instructor

EXTENSION FAMILY AND COMMUNITY DEVELOPMENT  
161 Milam Hall Corvallis, Oregon 97331-5106  
Tel: (541) 737-0997 Fax: (541) 737-0999  
<http://extension.oregonstate.edu/fcd>

**HP-340**

**email 11-01-06 from Lorraine Gill [Lorraine\_Gill@ykhc.org]**

Patricia N. Daniels  
Director  
Supplemental Food Programs Division  
Food and Nutrition Service, U.S. Department of Agriculture  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

Dear Ms. Daniels:

I am a Clinical Diabetes Educator and a registered dietitian in the Yukon Kuskokwim Delta based out of Bethel, Alaska. I am writing to strongly support the proposed new WIC Food Packages.

In our diabetes education we strongly encourage increasing fruit and vegetable consumption, limiting sodium, discourage juice for infants, and limiting it for women and children. We encourage whole grains and limited sugar in cereals. Milk needs to be fat free or 1% and cheese should be reduced or low fat. We also know that women who breastfeed and infants who are breastfed have increased their chances for preventing diabetes.

Diabetes is on the increase throughout the country and these changes will demonstrate better food choices for Americans. It is inconsistent to have WIC providing foods that do not meet the Dietary Guidelines for Americans.

Sincerely,

Lorraine Gill RD.MA,LD  
PO Box 3524 Bethel AK 99559

HP-341

From: Ashley Colpaart [acolpaart@mealsonwheelsandmore.org]  
Sent: Tuesday, October 17, 2006 12:35 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

I am in high support of redeveloping the food packages to include fresh fruits and vegetables. These are the foods that are most difficult to obtain, especially in at risk families. It also opens the possibility to create local and sustainable relationships between local farmers/markets and WIC centers. Increasing fruit/vegetable intake is crucial to combating the obesity epidemic. We should pull away from whole milk and cheese.

Ashley Colpaart, Dietitian

Nutrition Services Coordinator

Meals On Wheels and More

3227 E. 5th Street  
Austin, TX 78702  
512-476-6325 Ext. 150

acolpaart@mealsonwheelsandmore.org

"The destiny of nations depends on how they nourish themselves." -Brillat-Savarin

HP-343

From: WebMaster@fns.usda.gov  
Sent: Tuesday, October 17, 2006 2:01 PM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: Laura Pinyan, MS., C.N.S.  
EMAIL: dietetics@pacifichealth.org  
CITY: Bakersfield  
STATE: CA  
ORGANIZATION:  
CATEGORY: Other  
OtherCategory: Nutritionist at a nonprofit agency  
Date: October 17, 2006  
Time: 02:00:58 PM

COMMENTS:

I strongly support adding fruits, vegetables and whole grains to allowable foods in WIC food packages. Whole grain consumption may reduce the risk of diabetes, and fruit and vegetable consumption is associated with a lower risk for cancer in some studies. Providing these as part of Wic packages can establish food preference in children and set the stage for healthier eating throughout life.

HP-344

From: Doreen Chin-Pratt [DChinPratt@WIHRI.org]  
Sent: Friday, November 03, 2006 12:45 PM  
To: WICHQ-SFPD  
Subject: Docket 0584-AD77 WIC Food Package Rule

To: Patricia Daniels, Director, Supplemental Food Programs Division, FNS, USDA

Dear Ms. Daniels:

As a concerned citizen as well as a registered dietitian employed in a hospital that focuses on providing healthcare for primarily women and infants, I strongly support the majority of the issued proposed USDA rule governing the WIC Food Packages published in the Federal Register on August 7, 2006. These changes to the WIC Food Packages have been eagerly awaited for many years. Reflecting the recommendations made by the Institutes of Medicine: WIC Food Packages: Time for a Change and the 2005 Dietary Guidelines for Americans, they are supported by scientifically based evidence and data for the changes. The revisions are proposed to improve the nutritional health of all WIC participants as well as support breastfeeding all while including cultural foods of a diverse population enrolled in WIC. These are all furthering the original mission of the WIC Program as a nutrition and health education program. The strength and success of this long standing Federal program has been because of the focus on scientific and clinically based recommendations made from experts around the nation.

I do not, however, support the recommendation to pilot test the food package for the partially breastfed infant. By eliminating the choice to offer a reduced formula or totally eliminating a formula package for the first month if a mother chooses to breastfeed may very well backfire. Idealistically, offering supplementary formula in the first month, may tempt a mother to give formula to a baby and not exclusively breastfeed. Realistically and historically, based on 28 years of servicing women and their babies, many women will simply choose to formula feed for many reasons including feeling slighted out of a free product or nervousness that she won't have formula available if she feels breastfeeding is not going well. Fear of "starving" their babies rather than not wanting to breastfeed is an overwhelmingly significant barrier to breastfeeding. More emphasis on appropriate nutrition and breastfeeding education/support for the new WIC moms to recognize this fear may reap increased rates of breastfeeding if the WIC mom continues to breastfeed longer with the current ability to offer a reduced package of formula. Nutritionists and breastfeeding advocates should be counseling the proper use of supplemental formula as dictated by the individual circumstance of the WIC mom.

Inclusions of whole grains, fruits and vegetables as well as alternative protein sources and culturally based foods as options for the proposed WIC Food Package, will help to offer better choices for all of the WIC participants. This will help provide the tools and resources for WIC personnel to further and more appropriately educate and counsel participants on a healthier lifestyle and food choices. This will, undoubtedly, enhance the

efforts to prevent and control chronic disease and improve food security in our WIC families.

Thank you very much for this opportunity to comment on the WIC Food Package Rule. Implementation of the final rule and regulations will require exceptional planning and effective communication. It is mandatory that the USDA partner with all levels of State and Local agencies as well as the National WIC Association to successfully and efficiently make and activate the changes with the least amount of disruption to the daily administration of the Program.

Sincerely,

Doreen Chin Pratt, MS, RD, LDN  
Director, Clinical Nutrition Services  
Women and Infants Hospital  
101 Dudley Street Suite 565  
Providence, RI 02905

HP-350

email 11-04-06 from Rachel Bikoff, MPH  
14 Algonquin Drive  
Huntington Station, NY 11746  
bikoff@email.unc.edu

November 3, 2006

Patricia N. Daniels  
Director  
Supplemental Food Programs Division  
Food and Nutrition Service, USDA  
3101 Park Center Drive, Room 528  
Alexandria, Virginia 22302

Re: WIC Food Packages Rule, Docket ID Number 0584-AD77

Dear Ms. Daniels:

I am writing to express my strong support for the USDA's proposed changes to the current WIC food packages. It is well known that the WIC program provides a much-needed service for low-income pregnant women, new mothers, infants, and children. WIC has achieved tremendous success in reducing the incidence of low birth weight infants and fetal mortality, and contributes significantly to the overall nutritional health of participants.<sup>1</sup>

Over twenty years have passed since the WIC food packages were last revised. There has been a tremendous increase in knowledge surrounding diet and health, making this an opportune time for change. Therefore, I offer my enthusiastic support for the proposed guidelines. These revisions will expand participants' choices, thus catering to the needs of the culturally diverse WIC population, while also improving the nutritional quality of foods by offering fruits and vegetables, whole grains, and the option of soymilk and tofu.

As a public health nutrition professional, I am excited by this opportunity to create a food package that is of higher nutritional value. When the USDA begins to finalize the changes, I request that you consider the following suggestions:

- I strongly encourage the USDA to provide the full fruit and vegetable benefit recommended by the Institute of Medicine. In addition, the final rule should require that the fruit and vegetable benefit regularly receive cost of living adjustments (COLA).
- I support bringing the quantity of milk in the WIC food packages in line with the 2005 Dietary Guidelines for Americans. However, I recommend that the package follow the Dietary Guidelines by providing low-fat (1%) or fat-free (skim) milk for children ages 2-4 and women, as well as light, reduced-fat, or low-fat cheese, in order to reduce the intake of saturated fat.

Overall, I strongly support the USDA's proposed rule for updating the WIC food packages. I urge the USDA to publish the final rule promptly, by spring 2007 at the latest, to bring these improvements to WIC participants as soon as possible.

Sincerely,

Rachel Bikoff, MPH

<sup>1</sup>Child Nutrition Fact Sheet: Women, Infants, & Children. Food Research & Action Center. Available at: <http://www.frac.org/pdf/cnwic.pdf>. Accessed on 11/3/06.

14 Algonquin Drive  
Huntington Station, NY 11746

*Terri Riemenschneider, MS rickandt@att.net*  
324 Smith Avenue  
Milan, MI 48160

HP-351

11/4/2006

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service  
USDA  
3101 Park Center Drive  
Room 528  
Alexandria, VA 22302

Docket ID Number: 0584-AD77-WIC Food Packages Rule

Dear Ms. Daniels:

I am writing to express my support for the proposed rule to change the Special Supplemental Nutrition Program for Women, Infants and Children food packages. The health and well-being of the nation's women, infants, and children is a priority of our organization. The proposed changes will greatly benefit vulnerable mothers and children.

However, I am not sure that WIC PARTICIPANT'S will embrace the changes as a positive move into the 21<sup>st</sup> century for the most beloved nutrition program in the nation. I HIGHLY RECOMMEND a valid pilot study-in the WIC Community-evaluating the proposed food package changes to insure that they **meet the needs of the WIC participant**. In over 20 years of WIC experience, both at the local and state level, the significance of the acceptance of the USER should be a driving force. If the proposed food packages result in decreased utilization of the WIC Program, we lose a GIANT opportunity to provide support and education to families in need.

I agree that the proposed rule's changes are a step forward and will improve the overall health of WIC mothers and children by contributing to reductions in obesity and other diet-related chronic diseases-but ONLY if the participant's find the changes acceptable. In particular:

- I support adding fruits and vegetables to the food packages of women, infants and children while reducing the amount of fruit juice provided.

- I support the quantities of dairy products and eggs offered in the proposed rule.
- I am concerned, however, about the addition of alternative calcium sources such as soy beverage (soy milk) and tofu as additions to the food packages to address milk protein allergy, lactose maldigestion, personal preferences, and cultural diversity of the WIC population. The changes proposed to the milk and dairy food group do not address the use of lactose free dairy products and any restriction for use of the soy-based substitutes. Many people feel that soy products are more “natural” than traditional dairy and make choices that are not supported by research in providing soy to young children. I am concerned that the soy beverages that are widely available are NOT comparable to milk in quality of nutrients and those that are comparable are expensive and not widely available. I support limiting replacement of dairy with soy to those who have intolerance, instead of just preference, and the continued availability of lactose reduced/free dairy foods.
- I support the whole grain requirement for cereals and the introduction of whole grain bread and other whole grains such as corn tortillas and brown rice, however I’m not sure that participant’s on the WIC Program will understand the changes and take advantage of the products available.
- While I commend USDA’s efforts in the proposed rule to support the initiation and duration of breastfeeding, I urge that there be a test period for the partially breastfeeding food packages for women and infants. For women who declare themselves as breastfeeding moms, I urge that, consistent with the IOM recommendation, States be given the option to establish criteria under which infant formula may be provided in the first month. I feel that the current proposal doesn’t support breastfeeding because it isn’t flexible enough to meet participant needs.
- I also suggest that women who are breastfeeding and NOT receiving formula receive a voucher, equivalent to the value of a maximum allowable formula infant food package, for lactation counseling and support. Many communities DO NOT have sufficient breastfeeding support resources (in spite of WIC efforts) and WIC doesn’t currently have the resources to meet their needs. If WIC is TRULY committed to breastfeeding education and support, we need to be willing to pay for the resources necessary to provide the support. Many women who are committed to breastfeeding flounder along the way due to lack of support and resources, resulting in diminishment of breastfeeding.
- To further support breastfeeding, I urge that the cash-value vouchers for fruits and vegetables for fully breastfeeding women be increased to \$10. I believe that this change would be cost-neutral and a significant incentive for breastfeeding mothers.

- I feel that the Farmer's Market Nutrition Program has been a VERY valuable partner for WIC families and propose that cash-value vouchers for fruits and vegetables should be redeemable at these outlets. Continuing and strengthening the relationship of WIC participants and local food producers and growers further promotes food security throughout the nation and has proven to improve fruit and vegetable intake among WIC Participants.

The proposals will provide WIC professionals with the necessary tools to reinforce positive nutrition education messages and promote healthier food choices.

WIC is our nation's premier public health nutrition program. The long-term benefits of providing participants with fruits and vegetables, lower fat dairy products and whole grains, as well as support for ALL breastfeeding women will greatly aid WIC in improving the life-long health of our most vulnerable women, infants and children.

**I urge USDA to pilot** the proposed food package changes in the WIC community to demonstrate the PARTICIPANT'S acceptability to the changes. If breastfeeding rates FALL or participation/utilization of WIC services diminish, then we know we need to further review the acceptability of the changes before full implementation.

Giving states opportunity to be FLEXIBLE in their approach to food package design and implementation is also supported in order to recognize their population's needs. Thank you for the opportunity to comment on these important changes. God bless you all in your work!

Sincerely,

Terri Riemenschneider, MS (Nutrition)  
324 Smith Avenue  
Milan, MI 48160-1134

HP-356

From: Hugh Joseph [hughjoseph@comcast.net]  
Sent: Monday, November 06, 2006 10:16 PM  
To: WICHQ-SFPD  
Subject: Comments to proposed rule for WIC

Attachments: HJ letter.doc

Date: November 6, 2006

Ms Patricia Daniels, Director  
Supplemental Food Programs Division  
Food and Nutrition Service  
United States Department of agriculture  
3101 Park Center Drive Room 528  
Alexandria, Virginia 22303

Dear Ms. Daniels:

REF Docket ID Number 0584-AD77-WIC Food Package Rule

I am writing to strongly support the proposed revisions to the WIC food packages as proposed by USDA.

As a co-developer of the Farmers' Market Nutrition Program, I am particularly heartened by

Our pilot first started in 1986 in Massachusetts, selected WIC because there seemed to be an opportunity to add fruits and vegetables to a strongly supported nutrition program and at the same time be a benefit to local farmers. That program became a federal-state initiative in 1989 as a three-year pilot program, and then became a permanent program now operating in almost every state. Now called the WIC Farmers Market Nutrition Program (FMNP), this effort is assisting some 2.7 million WIC mothers and children and benefiting some 21,000 small farmers providing healthy, locally grown and very fresh fruits and vegetables to 30% of the WIC population in America at 2,200 farmers markets nationally. Most of the initial guidelines have stayed with the program because they seem to work.

There are now 3,740 U.S. farmers' markets serving millions of consumers and providing tens of thousands of farmers with strong market outlets for locally produced food. They operate in every state, nearly every major city, and can be found in almost every county.

The new food and vegetable benefit will allow vouchers can be redeemed at anywhere eligible retail food store. We are very pleased that farmers at farmers' markets will also be eligible to redeem them. We think this will work very well in conjunction with the current FMNP operations in almost every state. This will make it cost effective and practical. For this reason, I strongly encourage USDA to link the opportunity and distribution process for use of these vouchers at farmers markets to the existing FMNP. Not only will WIC clients be more likely to use them at farmers markets, but they will also get a much better selection of produce as a result. Because many markets are seasonal, they also will encourage state WIC programs to make every effort to tie these in with the FMNP at the appropriate times.

The current procedures for WIC FMNP benefit distribution, redemption, and accountability are consistent with the proposed revisions pertaining to fruit and vegetable vouchers. FMNP agencies (generally state health and agriculture departments) now issue vouchers that range in value from \$2 to \$5. They have voucher tracking and other accountability procedures as well as procedures to authorize participating farmers and farmers' markets. Additionally, both the development of farmers' markets and the implementation of the WIC FMNP require working partnerships and collaborations between multiple agencies and organizations, both public as well as private.

These experiences and practices, developed over the course of 17 years of operating the existing WIC Farmers Market Nutrition Program, should enable state and tribal WIC agencies to make a relatively smooth transition to the implementation of the proposed new WIC expanded fruit and vegetable cash voucher system, as long as the two programs are tied in together.

I again thank USDA for the proposal to make fruits and vegetables a regular part of the WIC food package.

Sincerely,

Hugh Joseph

Hugh Joseph, PhD

Program on Agriculture, Food and Environment

Friedman School of Nutrition Science and Policy

Tufts University

150 Harrison Ave., Room 121

Boston, MA 02111

Tel. 617-636-3788

Fax. 617-738-7777

HP-358

From: Cook, John [john.cook@bmc.org]  
Sent: Tuesday, October 17, 2006 11:31 AM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

Dear WIC program administrators:

I want to voice my strong support for the provisions in the proposed new WIC rules that increase the inclusion of fresh fruits and vegetables, low/not-fat dairy products, and alternative protein sources (soymilk and tofu) in the WIC food basket. These changes are very consistent with current parallel emphases on preventing and reducing overweight in the U.S. population and improving overall nutrition and health of low-income infants, children and women.

The proposed rules can be further strengthened by revisions that make it easier for mothers to use WIC to purchase fresh produce at farmers' markets and other produce retail outlets. We in the public health professions are very encouraged by the progress toward healthy eating that the proposed rule changes represent.

Sincerely  
John Cook

John T. Cook, Ph.D.  
Associate Professor  
Boston University School of Medicine  
Department of Pediatrics  
Rm 4208 Maternity Bldg.  
91 E. Concord St.  
Boston, MA 02118-2393  
Ph: 617.414.5129  
Fx: 617.414.3679  
Email: john.cook@bmc.org

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HP-359

From: DocHolmes@aol.com  
Sent: Tuesday, October 17, 2006 7:26 PM  
To: WICHQ-SFPD  
Cc: bbyers@northeasternhealth.org  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

To Whom It May Concern:

I would like to support the proposed WIC food package. It is clearly an improvement in the old package which has not been updated in many years. It is more consistent with current dietary guidelines for children. It is lower in fat and juice, which is accepted as the change in our diets that should be occurring. There are more grains, fruits and vegetables. The choices in general are healthier.

Thank you for including me in the 1000's of dietary connected individuals and physicians that have to do with nutrition in children. Please accept the proposed USDA package.

Thank you for your consideration.

Sincerely,

Paul W. Holmes, MD  
Medical Director  
Northeastern Rural Health Clinics  
A Community Health Center  
1850 Spring Ridge Dr.  
Susanville, CA 96130  
Office-530-252-4878  
Admin-530-257-5563  
Cell-530-251-7725  
docholmes@aol.com

HP-360

From: linda f palmer [lfpalmer@cox.net]  
Sent: Tuesday, October 17, 2006 8:54 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service  
USDA  
3101 Park Center Drive  
Room 528  
Alexandria, VA 22302

“Docket ID Number 0584-AD77, WIC Food Packages Rule,”

Dear Ms. Daniels:

Thank you for the excellent new changes to the food packages. I have but one comment: I see absolutely no reason for participants to need a medical excuse to purchase soy products rather than dairy. Consider first that probably half of your adult and older-child recipients are lactose intolerant.

Secondly, milk protein intolerance is common and does not always show up on allergy tests. If milk doesn't make someone feel good, they shouldn't drink it --- and they should be able to figure that out for themselves.

Thirdly, there is absolutely no evidence to support a concept that cow's milk is healthier than soy. Soy is very anti-cancer and choc-full of vitamins and minerals as well as antioxidants -- not found in milk. All around the world, the epidemiology shows that the more milk populations drink, the more osteoporosis the people suffer. I'm sure that you know that the 78,000 nurses study, among many others, agree with this finding. Soy on the other hand reduces osteoporosis. Milk is very deficient in most vitamins and minerals and promotes iron deficiency. In terms of vitamins, only A & D are provided by milk, and that's only because they're added --- and none are added to cheese. In terms of minerals, milk causes relative magnesium deficiency and calcium loss due to the excessively high levels of phosphorous (as well as animal protein). Soy milks are often supplemented with A & D as well, along with B12 and calcium. The phytonutrients in soy are valuable additions to a healthy body.

Best Regards,

Linda Folden Palmer, DC

Author: Baby Matters, What Your Doctor May Not Tell You About Caring for Your  
Baby

[www.babyreference.com](http://www.babyreference.com)

1229 Trieste Drive,  
San Diego, CA 92107

(619) 222-8753

HP-361

From: WebMaster@fns.usda.gov  
Sent: Tuesday, October 17, 2006 11:40 AM  
To: WICHQ-SFPD  
Subject: RevisionstoWICFoodPackages-Proposed Rule

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NAME: Elizabeth Robinson  
EMAIL: elizabeth.robinson@vtmednet.org  
CITY: Burlington  
STATE: VT  
ORGANIZATION: Vermont Children's Hospital  
CATEGORY: IndividualHlthProfessional  
OtherCategory:  
Date: October 17, 2006  
Time: 11:40:05 AM

COMMENTS:

Strongly agree with eliminating formula for breastfed babies and reducing juice for toddlers.

HP-362

MessageFrom: Wayne Agostino [wayneagostino@adelphia.net]  
Sent: Wednesday, October 18, 2006 1:15 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

To Whom It May Concern,

I would like to express my wholehearted support of the proposed changes to the WIC food packages. As a registered nurse and a mother who exclusively breastfed both my children, I strongly believe in the physical and emotional benefits of nursing babies. Supporting breastfeeding for all infants is vital to children's health, and I applaud this effort to promote breastfeeding in WIC mothers. This program will more than pay for itself in increased health for these babies and mothers, as well as stronger family bonds. The increased quality of nutritional offerings, especially in the area of lowfat dairy and dairy substitute foods as well as whole grains and fresh produce, are a wonderful step in a healthy direction. Please continue to make breastfeeding and good nutrition a priority for these families!!

Yours in good health,  
Amy Agostino, RN  
6 Willow Lane  
Londonderry, NH 03053

HP-363

MessageFrom: Lori L. Buendia [lbuendia@gvhc.org]

Sent: Wednesday, October 18, 2006 8:09 PM

To: WICHQ-SFPD

Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule,"

I am quite pleased with the new proposal for the WIC food package. Breastfeeding mothers would get an equal amount of provisions and getting formula packages to them a little later would encourage mothers to ask for help with breastfeeding. I hope this change will eliminate people thinking WIC is whee they go "to get formula".

Thank you for the opportunity to submit comments,

Lori Buendia RNC, IBCLC  
Children's Health Coordinator  
Golden Valley Health Centers  
737 W. Childs Avenue  
Merced, CA 95340  
209-385-5555  
lbuendia@gvhc.org

HP-364

From: Nicole George [ngeorge@mcg.edu]  
Sent: Thursday, October 19, 2006 5:34 PM  
To: WICHQ-SFPD  
Subject: ?Docket ID Number 0584-AD77, WIC Food Packages Rule,?

Patricia N. Daniels  
Director, Supplemental Food Programs Division Food and Nutrition Service USDA  
3101 Park Center Drive  
Room 528  
Alexandria, VA 22302

“Docket ID Number 0584-AD77, WIC Food Packages Rule,”

Dear Ms. Daniels:

I am writing to express my professional support for the proposed rule to change the Special Supplemental Nutrition Program for Women, Infants and Children food packages. I am a general pediatrician in academic practice in South Carolina this year. 90% of my families receive WIC support. The proposed changes will greatly benefit vulnerable mothers and children.

I am pleased that the proposed rule closely reflects the science-based recommendations of the Institute of Medicine published in their April 2005 report entitled, WIC Food Packages: Time for a Change. The changes reflected in the proposed rule are also consistent with the 2005 Dietary Guidelines for Americans and national nutrition guidance including those from the American Academy of Pediatrics.

The changes in the proposed rule are a significant step forward and will improve the overall health of WIC mothers and children by contributing to reductions in obesity and other diet-related chronic diseases. In particular:

- I support adding fruits and vegetables to the food packages of women, infants and children while reducing the amount of fruit juice provided. Increased consumption of fruits and vegetables is associated with reduced risk for obesity and chronic diseases such as cancer, stroke, cardiovascular disease, and type 2 diabetes. Fruits and vegetables added to the diet also promote adequate intake of priority nutrients such as Vitamins A, C, folate, potassium and fiber.
- I support the quantities of dairy products and eggs offered in the proposed rule. These quantities meet the 2005 Dietary Guidelines for Americans. We agree that alternative calcium sources such as soy beverage (soy milk) and tofu are necessary additions to the food packages to address milk protein allergy, lactose maldigestion, personal preferences, and cultural diversity of the WIC population.

· I support the whole grain requirement for cereals and the introduction of whole grain bread and other whole grains such as corn tortillas and brown rice. Whole grain consumption is associated with 1). reducing the risk of coronary heart disease, type 2 diabetes, digestive system and hormone-related cancers, 2). assisting in maintaining a healthy weight, and 3). increasing the intake of dietary fiber.

· While I commend USDA's efforts in the proposed rule to support the initiation and duration of breastfeeding, we urge that there be no test period for the partially breastfeeding food packages for women and infants. We believe that deletion of the pilot phase would speed the implementation of these packages. For women who declare themselves as breastfeeding moms, we urge that, consistent with the IOM recommendation, States be given the option to establish criteria under which infant formula may be provided in the first month.

· To further support breastfeeding, I urge that the cash-value vouchers for fruits and vegetables for fully breastfeeding women be increased to \$10. We believe that this change would be cost-neutral and a significant incentive for breastfeeding mothers.

WIC is our nation's premier public health nutrition program. The long-term benefits of providing participants with fruits and vegetables, lower fat dairy products and whole grains, as well as additional incentives for fully breastfeeding women will greatly aid WIC in improving the life-long health of our most vulnerable women, infants and children.

Thank you,  
Nicole S. M. George, MD  
Assistant Professor of Pediatrics, Medical College of Georgia, Augusta

Nicole George  
60 physicians drive suite 100  
aiken, SC 29801

HP-365

From: Jane\_E\_Kramer@rush.edu  
Sent: Thursday, October 19, 2006 3:49 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

I fully support the proposed changes to the WIC foods.

Jane E. Kramer, M.D.  
Pediatric Residency Program Director  
Director, Pediatric Emergency Medicine  
Rush University Medical Center  
1653 W. Congress Pkwy.  
Chicago, Illinois 60612  
312-942-4174  
Fax: 312-942-2243

HP-366

From: Martin, Dr. Jeannette [Jeannette.Martin@erlangers.org]  
Sent: Thursday, October 19, 2006 11:42 AM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

I am fully supportive of the recommended changes being made to the WIC packages.

For a very long time I have been concerned about children drinking way too much milk and juices, which interferes with their consumption of other foods of more nutritional value.

One suggestion, which I made a couple of years ago to my representative (Representative Zach Wamp) is to include infant vitamins for those infants who are solely breast fed (recommended by the AAP).

Jeannette Martin, M.D.

Director, Children's Ambulatory Care

TC Thompson Children's Hospital

UTCOM, Department of Pediatrics

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## ASSOCIATION OF GRADUATE PROGRAMS IN PUBLIC HEALTH NUTRITION, INC.

The following letter was endorsed by the Association of Graduate Programs in Public Health Nutrition, Inc. at their annual business meeting held on Sunday, November 5 2006.

.....  
\*  
November 5, 2006

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service, USDA  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

Docket ID Number: 0584-AD77-WIC Food Packages Rule

Dear Ms. Daniels,

The Association for Graduate Programs in Public Health Nutrition enthusiastically supports the Proposed Revisions in the WIC Food Packages. We agree that the proposed revisions:

1. Provide greater consistency with the *Dietary Guidelines for Americans (2005)*
2. Support improved nutrient intakes
3. Provide greater consistency with established dietary recommendations for infants and children under age 2, including an encouragement and support of breastfeeding
4. Address emerging public health nutrition-related issues such as child overweight
5. Provide a wider appeal to diverse populations

We strongly support the addition of fruits, vegetables, and whole grains to the WIC food packages for the first time, and also support the quantities of dairy products, eggs, and juice offered in the proposed rule. We especially agree with stronger incentives to encourage continued breastfeeding like including additional types and quantities of foods for breastfeeding mothers. To further support breastfeeding, we urge that the cash-value vouchers for fruits and vegetables for fully breastfeeding women be increased by \$2 for a total of \$10 per month. We also agree with incentives that discourage introducing complementary foods before 6 months of age, and support the addition of infant foods in the food packages for older infants to promote healthy dietary patterns.

The Association for Graduate Programs in Public Health Nutrition believes that the suggested changes to the WIC food packages are long overdue. The proposed changes have great potential to benefit the health of millions of women and children from all cultures and communities in the U.S. We urge publication of the final rule by the spring of 2007 to assure timely implementation of the rule's invaluable changes.

Sincerely,  
Donna B. Johnson, PhD, RD  
President, Association of Graduate Programs in Public Health Nutrition, Inc.

HP-367

10-27-06 email from jslavin@umn.edu

October 27, 2006

Patricia N. Daniels  
Director  
Supplemental Food Programs Division  
Food and Nutrition Service  
USDA  
3101 Park Center Drive  
Room 528  
Alexandria, Virginia 22302

Re: Docket ID Number 0584-AD77, WIC Food Packages Rule

Dear Dr. Daniels:

As a researcher in the area of whole grains, I applaud USDA for adding whole grains to food packages for women and children. The emphasis on whole grains in the proposed rule is consistent with the 2005 Dietary Guidelines for Americans that encourage increased consumption of these foods and recommendations for food patterns that may contribute to a healthy body weight. The scientific support for the role of whole grains in prevention of cardiovascular disease, diabetes, and obesity is strong (1). Consumers are challenged to include the recommended 3 servings of whole grains per day in their diet and early introduction of whole grains to children should ensure greater acceptance of whole grains upon exit from the WIC program.

Although there is widespread enthusiasm for whole grains, it is difficult to give simple advice on how to include whole grains in the diet. This is because whole grains are consumed throughout the day in the form of cereal, breads, soups, casseroles, and mixed dishes. Although this makes it possible to eat whole grains at every meal, it makes it difficult to regulate and label whole grains. The original health claim for whole grains required that 51% of the food, by weight, be whole grains. Although this can work for dry cereals, it is not possible for foods like breads, brown rice, barley, and other emerging whole grains to fit within this definition, although we know they are whole grain.

Although for many Americans bread and cereals are the main ways to consume whole grains, for many cultures whole grains are much more likely to be consumed as brown rice, bulgur, oatmeal, or whole-grain barley. All whole grains contain bran, endosperm, and germ, but the composition of each grain varies greatly (2). Thus, restrictive rules that require a certain amount of dietary fiber or weight of whole grain to qualify as a whole

grain may not work for certain whole grains, especially those consumed after addition of water in cooking or food preparation.

As whole grain intake continues to be low in the United States, please ensure that a wide variety of nutrient-dense, culturally appropriate, and cost neutral choices are available to the WIC population when they choose whole grains. Whole grains such as brown rice, bulgur, oatmeal, and whole-grain barley should be considered primary sources of whole grain in the WIC Food Packages in the same manner that whole grain bread is listed in the proposed package.

USDA's effort to include whole grains in the WIC package is a great service to improve public health by the inclusion of whole grains in the diet. The difficulty in finding an easy way to differentiate whole grain foods should not lead you to limit the inclusion of brown rice and other whole grains not normally consumed as bread or cereal in the WIC package. Many of the WIC population are already rice consumers and helping them shift from white to brown rice is a better strategy for increasing whole grain consumption as opposed to promoting only whole grain bread and cereal consumption.

Again, thanks for moving forward on whole grain inclusion in the WIC package. It is a huge step forward for increasing whole grains in the United States population.

Sincerely,

Joanne L. Slavin, PhD, RD  
Professor  
University of Minnesota  
Department of Food Science and Nutrition  
1334 Eckles Avenue  
St. Paul, MN 55108

References

1. Slavin JL (2004) Whole grains and human health. *Nutrition Research Reviews* 17:99-110.  
Slavin JL (2005) Whole grains, dietary fibre and health. Insert to *J Can Diet Assoc* Vol 66:2, Summer 2005.

11-03-06 email

**Ellen Sirbu, MS, RD**  
**2137 Braemar Road**  
**Oakland, CA 94602**  
**esirbu@sbcglobal.net**  
**(510) 531-6843**

**HP-368**

November 2, 2006

Ms. Patricia N. Daniels, Director  
Supplemental Food Programs Division  
Food and Nutrition Services  
U.S. Department of Agriculture  
3101 Park Center Drive, Room 528  
Alexandria, Virginia 22302

**RE: Comments on WIC Food Packages Proposed Rule,  
Docket ID Number 0584-AD77.**

Dear Ms. Daniels,

Thank you for the opportunity to provide comments on the USDA's proposed regulations that substantially revise the WIC Food Packages. I recently retired from the City of Berkeley WIC Program, where I was the coordinator/nutritionist for 31 years. The City of Berkeley has had an exclusive breastfeeding rate of 38% for many years and has received funding from USDA for a breastfeeding peer counselor program. After being with WIC for so many years, I am very excited to see the proposed regulations. I believe that, when implemented, they will greatly strengthen the WIC program's ability to improve the nutrition and health status of millions of families.

Below are my comments/recommendations.

**1. Timely Implementation of Final Rule.** USDA needs to review all comments and publish a Final Rule by June 30, 2007 at the very latest.

**2. Fruits and Vegetables.** (a) I strongly support providing cash-value vouchers to purchase fruits and vegetables. While the IOM recommended \$10/ and \$8/month vouchers, the proposed rule reduced this amount to \$8/ and \$6/month in order to achieve overall cost neutrality. Since fruits and vegetables are such an important part of a healthy diet, I strongly recommend that the final regulations follow the IOM's recommendation. However, the proposed voucher levels are an excellent start and should be immediately implemented. (b) Allow states, through their store authorization procedures, to specify the minimum stocking requirements for fruits and vegetables. Setting the minimum

stocking level arbitrarily at two will not encourage state agencies or vendors to provide the wide variety of fruits and vegetables WIC clients purchased in the three pilot programs. (c) Formulate regulations that enable states to utilize existing Farmers' Market Nutrition Programs

**3. Alternative Dairy Products.** (a) Establish an alternative minimum nutrient standard for soy beverages. I recommend that the specifications for protein and potassium in calcium-fortified soy beverages follow the FDA and industry standards for protein at 6.25 grams minimum and for potassium at 250 milligrams per 8 ounce serving. (b) Waive the medical documentation requirement for children to receive soy beverages. This proposed rule will place an undue burden on local agencies and will delay access to an important food for children. Right now we don't require medical documentation for soy formula.

**4. Breastfeeding Women and Infants.** (a) Provide the original \$10 IOM recommendation for fruits and vegetables. (b) implement the proposed rule for the fully breastfeeding, partially breastfeeding, and fully formula feeding packages concurrently without the pilot phase. Without full implementation the proposal to delay would only provide a disincentive for women to breastfeed. (c) **and very importantly, give states the option to develop a policy that would let breastfeeding infants receive one can of formula during the first month if medically necessary. Without this option I am concerned that some mothers will choose to formula feed. Having run one of the most successful WIC breastfeeding programs in the United States, I feel it is extremely important to have this flexibility during the first month of an infant's life.**

**5. Whole Grains and Whole Grain Breakfast Cereals.** Maintain the proposed criteria for breakfast cereals and allow states the flexibility to make appropriate substitutions needed for medical conditions. I recommend that special packages be issued that are wheat-free when medically indicated.

**5. Other Positive Changes Will Improve Dietary Intake.** I support the proposals to reduce the amount of certain foods (milk, cheese, eggs, and juice) in order to better align WIC with current Dietary Guidelines and recommendations from the American Academy of Pediatrics. In particular:

- The proposal to **reduce juice and replace it with infant food at 6 months** will support recommendations by the American Academy of Pediatrics for introducing infants to fruits and vegetables at the appropriate age. **However, I strongly recommend that fresh fruits and vegetables be an option as well, so that caretakers can make their own baby foods.** Many parents much prefer to make their own foods, which usually taste better and are much less expensive. I believe that parents/guardians can be shown how to fix the foods properly and that food safety should and can be taught to the WIC clients.

- The inclusion of **lower-fat milk and less cheese and eggs** supports adequate calcium intake, while at the same time lowering saturated fats and cholesterol in accordance with current dietary guidance.
- The allowed substitution of salmon and sardines for tuna is an excellent proposal.

**6. Categorical Tailoring and Substitution Requests.** I am opposed to the removal of the state option to categorically tailor or propose food substitutions. It is essential that states be allowed the ability to revise food lists to provide for the needs of their participants.

All of these proposed changes will strongly reinforce WIC nutrition education messages, as well as address the cultural food preferences among WIC's diverse population. These changes will address the obesity epidemic, and help low-income families make healthier food choices.

Sincerely,

Ellen Sirbu, MS, RD  
Retired City of Berkeley WIC Coordinator/Nutritionist.

HP-369

From: Cindy Schneider [cschneider@cfl.rr.com]  
Sent: Monday, November 06, 2006 7:51 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number 0584-AD77, WIC Food Packages Rule

I want to start by saying that I am supporting the USDA issued proposed rule governing the WIC food Package published in the Federal Register on August 7, 2006.

The revisions are based on sound science, aligned with the 2005 Dietary Guidelines for Americans, support the current infant feeding practice guidelines of the American Academy of Pediatrics and support the establishment of successful long-term breastfeeding. The proposed food package provide WIC participants with a wider variety of choices, allow state agencies greater flexibility to accommodate cultural food preferences and address nutritional needs of our most vulnerable women, infants and children.

The proposed rule reflects recommendations made by the Institute of Medicine (IOM) of the National Academies in its report, "WIC Food Packages: Time for A Change." As the Institute advised, the WIC Program needs to respond to changes in nutrition science, demographics, technology, and the emerging health concerns of our nation. The proposed rule appears to balance the new foods with recommending less juice, eggs and milk to maintain cost neutrality. The addition of fruits and vegetables is essential to promote the health benefits widely known to be provided by these foods.

I support the addition of infant fruits and vegetables at 6 months of age in varying amounts for fully breastfeeding, partially breastfeeding and fully formula feeding infants, as well as infant food meats for fully breastfeeding infants. The addition of fruits and vegetables through "cash value vouchers" in the proposed amounts of \$8 for women and \$6 for children is a great benefit to families. I strongly support the amount for fully breastfeeding women to be increased to \$10 to match the IOM recommendation to provided further incentive and support for fully breastfeeding. I also recommend that the dollar denomination of the "cash value vouchers" and the stocking requirements for vendors be determined at the discretion of the WIC State agencies.

The proposed rule generally supports breastfeeding. However, we do not support the recommendation to pilot test the food package for the partially breastfeeding woman. I

recommend that the fully breastfeeding, partially breastfeeding and fully formula feeding woman's food package changes be implemented concurrently to avoid the appearance of "partiality". I also strongly recommend that States be given the option to provide the breastfeeding infant, in the first month, with 1) no formula, or 2) one can of powdered formula as recommended in the IOM report.

The recommendation to "round up formula" to the maximum reconstituted amount over time creates an administrative burden for local WIC agencies. The cans change in size periodically as manufacturers determine and to track the can size over a period of a year for rounding up calculations is an additional burden to already overworked and understaffed local WIC agencies. I hope this will not be included in the final rule.

The calcium-set tofu and calcium-rich and vitamin D-rich soy beverages as alternatives for milk are long overdue as a benefit to families who require this soy preference to meet their nutritional needs. I would urge levels of 6.25 grams of protein and 250 milligrams of potassium per 8 ounce serving as alternative minimum standards for women and children soy beverages. It is imperative that women and children be able to receive soy products without the requirement of medical documentation. The reputation of the WIC Program will suffer in the medical community if we send families to their physician to support a normal nutrition food choice. The added time and cost to participants is not acceptable and it creates an administrative burden for local WIC agencies. I hope that this will be excluded from the final WIC Food Package rule.

The proposed rule to include whole grain bread and other grains for all children and pregnant and breastfeeding women is consistent with current scientific recommendations. I support the IOM recommendation to make substitutions for "wheat-free" cereals based on medical prescription.

I recommend flexibility in providing whole milk to children over two years of age who are underweight since this is a viable nutritional choice to support their health and weight gain requirements.

I fully recognize the need for good planning to allow implementation of the new food package with vendors and participants. I would recommend at least a two-year time frame from the publication of the final rule to allow WIC State agencies adequate

preparation, training, coordination and technological adaptation to implement the final revised WIC food package.

WIC is our nation's premier public health nutrition program. The long-term benefits of providing participants fruits and vegetables, lower fat dairy products and whole grains, as well as additional incentives for breastfeeding women will greatly improve the health of women, infants and children.

Sincerely,

Cindy Schneider, MS, RD, LD/N

HP 370



SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE

*Community Health Sciences*

November 4, 2006

Patricia N. Daniels, Director  
Supplemental Food Programs Division  
Food and Nutrition Service, USDA  
3101 Park Center Drive, Room 528  
Alexandria, Virginia 22302

Dear Ms. Daniels:

I would like to congratulate you and all those in your office who assisted in the efforts to revise the WIC Food Package. The proposed rule, published in the August 7, 2006 edition of the Federal Register, if adopted in its entirety, would make a dramatic improvement in the WIC Food Package. As a nutrition and health professional, I believe these changes are necessary, and are likely to have significant beneficial effects for the health of WIC participants.

I have reviewed the proposed rule in its entirety. Rather than list all of them, I will just state at the outset that I support each and every one of the proposed revisions listed therein. In your tallying of my comments, please indicate that I endorse all of these revisions, except for those discussed below.

There are three instances in which I believe the proposed revisions should be amended, specifically regarding: the increase of formula prescriptions for infants at 4 months of age; partial breastfeeding beginning at 1 month; and the establishment of fruit and vegetable vouchers at \$8 for women and \$6 for children.

The proposed rules suggest delaying complementary foods for infants by two months until 6 months of age and to increase formula prescriptions at four months to offset the lost food energy. I am in favor of delaying complementary foods until 6 months, but suggest that **formula amounts not be increased for formula-fed children at four months of age**. American Academy of Pediatrics (AAP) recommendations include both delay of complementary foods until 6 months AND breastfeeding until 6 months of age. By increasing the formula in the formula-fed package, you are making it more likely that women will not follow the advice on breastfeeding.

I have led research that indicates the WIC Program, through the value of formula given to participants, may be creating disincentives to breastfeeding and negatively impacting on breastfeeding initiation and duration rates.<sup>1</sup> As the IOM panel has pointed out, the economic incentives in the WIC packages for those who breastfeed should be increased relative to those

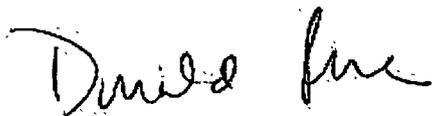
that formula feed. Here is an instance in which the FNS regulation is working in the opposite direction to this objective, in effect, creating a greater incentive for women to shift from breastfeeding to bottle-feeding at four months of age. Although some may argue that such a package would not then meet required energy needs of formula-fed infants, neither does the WIC breastfeeding package meet full needs of breastfeeding infants, given maternal conversion factors and women's own needs. In the end, WIC is a supplemental program and there is no reason why supplements for formula-fed infants should be more generous than for breast-fed infants.

The proposed rules suggest creation of a third infant feeding option – partial breastfeeding beginning in the 2<sup>nd</sup> month of life. While the proposal to not provide formula to full or partially breastfeeding infants for the first month of life is an improvement, it does not go far enough. Six-month duration rates are low in the U.S. Women, who obtain formula through a partial breastfeeding package, are likely to wean their children earlier. **I suggest delaying the partial breastfeeding option at least until the third month of life.**

Consumption of fruits and vegetables has documented benefits to health. In recognition of this, the revisions propose establishment of fruit and vegetable vouchers for women at \$8 per month and for children at \$6 per month. **These should be increased to be in line with IOM recommendations of \$10 and \$8 for women and children, respectively.** Fruit and vegetable consumption is low in the U.S., particularly among low-income populations. Significant economic incentives are necessary to increase consumption of these foods. Cost-savings to pay for this change could be obtained by the adoption of formula-reduction suggestions made above.

Thank you for consideration of these comments.

Sincerely,



Donald Diego Rose, PhD, MPH  
Associate Professor  
Community Health Sciences Department

<sup>1</sup> Rose D, Bodor JN, Chilton M. "Has the WIC Incentive to Formula-Feed Led to an Increase in Overweight Children?" *Journal of Nutrition* 2006;136:1086-1090.

HP-372



Department of Nutrition, Food Studies, and Public Health  
35 West 4th Street, 10th Floor  
New York, NY 10012-1172  
Telephone: 212.998.5580  
Fax: 212.995.4194  
Email: [nutrition@nyu.edu](mailto:nutrition@nyu.edu)  
[www.nyu.edu/education/nutrition](http://www.nyu.edu/education/nutrition)

November 3, 2006

Patricia N. Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service, USDA  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

Docket ID Number: 0584-AD77-WIC Food Packages Rule

Dear Ms. Daniels,

Faculty members in the Nutrition and Dietetics Program in the Department of Nutrition, Food Studies, and Public Health, the Steinhardt School of Education, New York University enthusiastically support the Proposed Revisions in the WIC Food Packages. We agree that the proposed revisions:

1. Provide greater consistency with the *Dietary Guidelines for Americans (2005)*
2. Support improved nutrient intakes
3. Provide greater consistency with established dietary recommendations for infants and children under age 2, including an encouragement and support of breastfeeding
4. Address emerging public health nutrition-related issues such as child overweight
5. Provide a wider appeal to diverse populations

We strongly support the addition of fruits, vegetables, and whole grains to the WIC food packages for the first time, and the quantities of dairy products and eggs offered in the proposed rule. We especially agree with stronger incentives to encourage continued breastfeeding like including additional types and quantities of foods for breastfeeding mothers. To further support breastfeeding, we urge that the cash-value vouchers for fruits and vegetables for fully breastfeeding women be increased by \$2 for a total of \$10 per month. We also agree with incentives that discourage introducing complementary foods before 6 months of age, and support the addition of infant foods in the food packages for older infants to promote healthy dietary patterns.

We believe that the suggested changes to the WIC food packages are long overdue. The proposed changes have great potential to benefit the health of millions of women and children from all cultures and communities in the U.S. We urge publication of the final rule by the spring of 2007 to assure timely implementation of the rule's invaluable changes.

Sincerely,

L. Beth Dixon, PhD, MPH  
Lisa Sasson, MS, RD  
Kristie Lancaster, PhD, RD  
Domingo Pinero, PhD  
Frederick Tripp, MS, RD  
Laura L. Hayman, PhD, RN  
Sharron Dalton, PhD, RD  
Judith Gilbride, PhD, RD

Nutrition and Dietetics Program  
Department of Nutrition, Food Studies and Public Health  
The Steinhardt School of Education  
New York University  
[www.nyu.edu/education/nutrition](http://www.nyu.edu/education/nutrition)

HP-373



SCHOOL OF PUBLIC HEALTH  
 P.O. BOX 951772  
 LOS ANGELES, CA 90095-1772

November 4, 2006

Patricia Daniels  
 Director, Supplemental Food Programs Division  
 Food and Nutrition Service, US Department of Agriculture  
 3101 Park Center Drive, Room 528  
 Alexandria, VA 22302

Re: Docket ID Number: 0584-AD77-WIC Food Packages Rule

Dear Ms. Daniels:

I am writing to express my very strong support for the proposed rule to change the Special Supplemental Nutrition Program for Women, Infants and Children food packages; to commend USDA for your approach thus far; and to urge that the final rule be published early in 2007. I also have a few specific comments and suggestions.

First, it is entirely appropriate that you have proposed adopting the IOM Committee's recommendations for new packages pretty much entirely. I was a member of that Committee, and want to reinforce that the design of the IOM recommendations was very consciously based on an evidence-based analysis of needs and options; that the specific recommendations are interdependent; and taken as a whole will bring the WIC food packages into line with US Dietary Guidelines, nutrient needs of the WIC population, and pediatric nutrition guidelines of the American Academy of Pediatrics. The new packages will make WIC nutrition education more effective by making it congruent with the food prescriptions. And given the very large proportion of pregnant and new mothers, infants and children served, the newly re-designed food packages should serve to measurably improve the health of the next generation.

Second, and this is very important in my opinion, I would urge you to reconsider the plan for pilot testing of the partially breastfeeding package. Such piloting would significantly delay implementation of this change, which I believe to be firmly supported in evidence that use of formula in the first few weeks inhibits the successful establishment of lactation and is a risk factor for reducing breastfeeding duration. As mentioned and urged by the National WIC Association in their comment on the proposed rule, states can be given the option to establish criteria under which infant formula can be provided in the first month to breastfeeding mother/infant pairs. This will provide flexibility where it is needed without delaying the implementation of the general provision, which I am convinced will work in the direction of supporting breastfeeding. Evaluation of the effects of the revised packages on breastfeeding initiation rates and duration can be accomplished with creatively utilizing the inevitable variation in timing of adoption of the new packages by state agencies.



Patricia Daniels  
November 4, 2006  
Page 2

Third, I understand that the proposed implementation of fruit and vegetable vouchers at the levels of \$6/month for children and \$8/month for women, rather than \$8 and \$10 as proposed by the IOM, is for cost containment reasons. I would urge that the funding be found somehow to restore the recommended levels; I realize that you have constraints, but the amount we are talking about is very small in relation to the overall program and certainly in relation to the federal budget. The research (mentioned in the proposed rule) which I and others carried out with adding vouchers worth ten times as much as IOM proposal, namely \$10/week for WIC participant women, resulted in almost total utilization of the vouchers, purchase of a wide variety of fresh fruits and vegetables, and improvement fruit and vegetable intake that was sustained for at least six months after discontinuation of the intervention. That work is now published and in press, and therefore can be cited. The redemption rate and variety of items purchased was published in the May 2006 *Journal of the American Dietetic Association*, and the main outcomes paper describing increases and sustainability of fruit and vegetable consumption is now in press in the *American Journal of Public Health*. I am attaching pdf files of both papers to this message for any use you may be able to make of them.

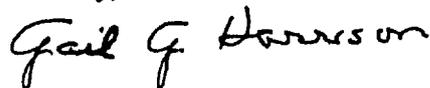


Fourth, I want to explicitly support the reductions in quantities of milk, eggs, cheese and juice proposed for the new packages, and the use of only nonfat or low-fat milk for all participants over the age of two years. The amounts and types of these foods proposed are entirely consistent with current dietary guidance, and the reductions make financial room for the increased fruits and vegetables, infant meats, and variety in children's and women's packages.

And last, I must confess a minor disappointment that low-fat yogurt, recommended by the IOM committee as a milk substitute, is not included in the proposed rule. I understand that the reason was cost containment. However, so many of the comments to the IOM committee during our deliberations stressed this to be a desirable thing that I think omitting it is a mistake. It is a nutritionally sound substitute, and so highly desirable for many adult women that its inclusion might actually improve intakes of calcium and related nutrients. As in the case of the reduced value for the fruit and vegetable vouchers, the amount of money involved here is small in the overall picture.

Thank you for the opportunity to comment on the proposed rule. I sincerely hope that the permanent rule will follow in a very short period of time.

Sincerely,



Gail G. Harrison, PhD  
Professor, Department of Community Health Sciences  
Associate Dean for Academic Affairs  
Senior Research Scientist, UCLA Center for Health Policy Research



## Research and Professional Briefs

# Choices Made by Low-Income Women Provided with an Economic Supplement for Fresh Fruit and Vegetable Purchase

DENA R. HERMAN, PhD, MPH, RD; GAIL G. HARRISON, PhD; ELOISE JENKS, MD, RD

**ABSTRACT**

Vouchers for fresh fruit and vegetable purchase were provided to low-income women participating in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in Los Angeles, CA. As the program is currently constituted, the supplemental foods provided contain no fresh produce except for carrots for exclusively breastfeeding women. This study investigated whether providing supplemental financial support specifically for purchase of fresh fruits and vegetables would result in high uptake of the supplement, and what the individuals would choose to purchase. A total of 602 women enrolling for postpartum services at three selected WIC program sites in Los Angeles were recruited. Sites were assigned to intervention with vouchers redeemable at a local supermarket, a nearby year-round farmers' market, and a control site with a minimal non-food incentive. Vouchers were issued bimonthly, at the level of US \$10/wk, and carried out for 6 months. Of 454 participants who completed the study (75.4%), 86% were Hispanic, 7% non-Hispanic black, and 7% of other ethnic backgrounds. Assessment of uptake was by voucher redemption rates and was approximately 90% for both groups. Participants reported purchasing a wide variety of items at both sites. The 10 most frequently mentioned items were oranges, apples, bananas, peaches, grapes, tomatoes, carrots, lettuce, broccoli, and potatoes. In conclusion, low-income women used the supplement provided almost fully, and purchased a wide variety of fresh

fruits and vegetables for their families. No particular barriers arose to redemption of the vouchers by either the participants or the retail vendors.

*J Am Diet Assoc.* 2006;106:740-744.

Greater consumption of fruits and vegetables is associated with a reduced risk of cancer (1,2); stroke and, perhaps, other cardiovascular diseases (3); and type 2 diabetes (4). In addition, increased fruit and vegetable consumption may be useful in weight maintenance or intentional weight loss (5). Recommendations from various national and international agencies are that optimal diets for preventing chronic disease should include 400 to 800 g/day fruits and vegetables (1), or five to nine servings (6). The recent report of the Dietary Guidelines Advisory Committee in the United States (5) recommends five to 13 servings per day, or 2½ to 6½ cups/day depending on energy needs. Current intakes in most populations are less than these recommendations (7). In the United States, the National Cancer Institute reports that the average total fruit and vegetable consumption for individuals 2 years of age and older has remained fairly steady at 4.5 servings in 1989 to 1991, 4.9 servings in 1994 to 1996, and 4.7 servings in 1999 to 2000 (7). Individuals at lower income and education levels tend to consume fewer fruits and vegetables than those with more education and higher income (6). There have been a number of interventions designed and implemented to inform the public of the benefits of greater fruit and vegetable consumption. In the United States, the most recognized is the National Cancer Institute's "5 A Day for Better Health" campaign, a national health education campaign that was designed based on a program originating in California in the late 1980s (8).

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a large public health program in the United States designed to provide supplemental foods of high nutritional quality, nutrition education, and referral to health care for low-income and nutritionally at-risk women during pregnancy and the postpartum period and to their infants and young children up to the age of 5 years (9). The program was established in the mid-1970s and has grown steadily. Currently more than 7½ million individuals are served by the program (9). The WIC program currently reaches approximately half of all newborn infants and their mothers, and 25% of young children in the United States (9). The WIC program was designed and first implemented at

*D. R. Herman is an adjunct assistant professor, Department of Community Health Sciences, University of California at Los Angeles School of Public Health; G. G. Harrison is a professor, University of California at Los Angeles School of Public Health and University of California at Los Angeles Center for Health Policy Research; and E. Jenks is an executive director, Public Health Foundation Enterprises WIC Program, Los Angeles, CA.*

*Address correspondence to Dena R. Herman, PhD, MPH, RD, Senior Scientist, Nutrilite, Division of Access Business Group, 5600 Beach Blvd, Buena Park, CA 90621-2007. E-mail: dherman@ucla.edu*

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*0002-8223/06/10605-0012\$32.00/0*

*doi: 10.1016/j.jada.2006.02.004*

a time when a predominant concern was undernutrition in low-income populations. The enabling legislation directed the program to focus on providing foods that were good sources of calcium, iron, vitamin A, vitamin C, and high-quality protein, because these were at the time the nutrients shown to be relatively lacking in the diets of low-income women and children. The food packages have changed little since the program's beginnings (10,11). Supplemental foods are provided (usually through vouchers redeemable at retail stores) as specified amounts of foods tailored to individual needs from the following list: milk, cheese, eggs, infant formula, fortified cereals, fruit juice, peanut butter, or dry beans. A modification to the food package for exclusively breastfeeding women was made in 1992, to include fresh carrots and canned tuna (10,11).

Over the last several years there has been considerable discussion of the possibility of adding fresh fruits and vegetables to the WIC food packages for women and children, given the current evidence of their value in the construction of optimal diets (2,3). Therefore, the objectives of the current study were to: a) evaluate the extent to which participants would take advantage of a subsidy specifically targeted for fruits and vegetables (12,13), b) determine which of the specific eligible items should be restricted or left to the individual participant's choice (this is important given that the nutrient content of fruits and vegetables varies widely and the program has a mandate to provide sources of nutrients shown to be lacking in the diets of the target populations), and c) assess the practicality of vouchers for fresh produce at the retail level in terms of the retail vendor's responsibilities.

## METHODS

A nonequivalent control-group design intended to measure the effectiveness of two interventions to increase the consumption of fresh fruits and vegetables among postpartum WIC-participant women and their families was used. A total of 602 women (approximately 200 per site) enrolling for WIC program services were recruited at three selected WIC program centers in suburban areas of Los Angeles, CA, between February and August 2001. Participants were recruited sequentially, including the first 200 eligible at each site. The study sites (two intervention and one control) were selected based on similarity with regard to caseload, distribution of ethnic backgrounds of participants, and geographic proximity of supermarkets, grocery stores, and farmers' markets. To ensure equal access to a variety of fresh fruits and vegetables at each of the study sites, centers selected for participation each had a major supermarket chain store and a certified year-round farmers' market within walking distance (not more than ½ mile) from the WIC program site. Eligibility criteria for the individual participants included women who: a) had recently delivered and recertified for WIC participation as either a breastfeeding or nonbreastfeeding postpartum woman, b) were English- or Spanish-speaking, and c) were at least 18 years of age. Seventy-five percent of recruited participants (454) completed the entire study including all interviews. Drop-out rates for each of the sites were as follows: 30% for the supermarket, 16% for the farmers' market, and 29% for the control. The primary reason for leaving the study was

"moving away" (approximately 90%). Other reasons included "no time" due to going back to work (5%) and no longer participating in the WIC program (no longer income eligible, 5%).

After a 2-month monitoring period to verify participants' current fruit and vegetable intake (using 24-hour quantitative dietary recalls), participants at the two intervention sites were issued \$10\* worth of vouchers per week, in \$10 units for the supermarket site and in \$2 units for the farmers' market site, to buy produce of the participant's choice. Vouchers were issued bimonthly and could be spent over the ensuing 2-month period at any time. At the control site, no fruit and vegetable subsidy was implemented but participants were provided with a lesser-value set of coupons (\$13/month) redeemable for disposable diapers, in compensation for their time participating in interviews. Redemption rates for these coupons were not tracked. Participants were instructed on the proper use of the vouchers at each of the sites, but apart from the regular WIC classes, no additional nutrition education information was provided for this study. Participants were interviewed by specially trained WIC nutritionists, in English or Spanish according to the participant's preference, six times in the two intervention sites and four times at the control site over a period of 14 months (baseline, 2 months after baseline, end of 6-month intervention, and 6 months after the end of the intervention). Recruitment of individuals spanned a 6-month period, ensuring that information on consumption of fruits and vegetables included all seasons. Quantitative, 24-hour dietary recalls were conducted at four interviews for all participants; in addition, at the intervention sites, two extra interviews spaced 2 months apart were conducted to obtain information on the fruits and vegetables purchased with the vouchers. Specifically, participants were asked to respond to the question, "What did you buy with your fruit and vegetable coupons last week?" Voucher redemption rates were obtained from scanned data from the supermarket's corporate headquarters. In the farmers' market condition, vouchers presented for purchase were collected by the farmers' market manager and turned in to the city government's accounting department for tallying; vouchers were then mailed to the study's research staff, who recounted the redeemed vouchers and logged the tallies into an electronic database. The study protocol was reviewed and approved by the institutional review board/human subjects protection committee of both the University of California at Los Angeles and Public Health Foundation Enterprises, Inc, City of Industry, CA.

## RESULTS

Participants' demographic characteristics approximated those of Public Health Foundation Enterprises, Inc's WIC program, with 86.3% Hispanic, 6.6% non-Hispanic black, 3.9% non-Hispanic white, 3.0% Asian American, and 0.2% Native American. The average age was 27.2 years (median 27 years, range 17 to 43 years), average educational level was 10±3.5 years (median 10 years, range 0

\*All dollar amounts are US dollars.

**Table.** Individual fruits and vegetables as percent of total fruit and vegetable items reported purchased by participants in the Los Angeles, CA WIC<sup>a</sup> program during the 6-month fruit and vegetable voucher intervention period, by site

Farmers' Market Site				Supermarket Site			
Fruits	%	Vegetables	%	Fruits	%	Vegetables	%
Apples	25.4	Tomatoes	14.2	Bananas	28.3	Carrots	18.8
Oranges	19.2	Lettuce	13.2	Apples	26.5	Tomatoes	15.4
Peaches	13.9	Broccoli	11.7	Oranges	15.8	Lettuce	14.3
Grapes	8.4	Carrots	9.8	Grapes	4.9	Broccoli	11.5
Strawberries	7.1	Potatoes	9.1	Pears	4.1	Potatoes	10.4
Watermelons	4.7	Green beans	7.1	Watermelons	4.0	Squash	3.9
Cantaloupes	4.5	Corn	5.0	Peaches	3.5	Onions	3.8
Pears	4.1	Squash	4.7	Strawberries	2.3	Spinach	2.7
Bananas	3.2	Spinach	4.4	Cantaloupes	1.9	Zucchini	2.6
Plums	3.1	Zucchini	4.0	Papayas	1.5	Cauliflower	2.4
Nectarines	2.0	Onions	2.2	Melons	1.4	Cabbages	2.1
Grapefruits	0.9	Cauliflower	2.1	Pineapples	1.1	Cucumbers	2.0
Apricots	0.7	Cucumbers	2.0	Plums	1.0	Green beans	1.9
Melons	0.5	Cabbages	2.0	Mangos	1.0	Corn	1.3
Tangerines	0.5	Cilantro	1.7	Nectarines	0.7	Avocados	1.1
Cherries	0.4	Avocados	1.5	Lemons	0.5	Chili peppers	1.1
Mandarins	0.4	Radishes	1.0	Apricots	0.3	Cilantro	0.7
Raspberries	0.3	Bell peppers	1.1	Cherries	0.3	Celery	0.7
Blueberries	0.2	Celery	0.6	Limes	0.3	Bell peppers	0.4
Limes	0.2	Green onions	0.4	Tangerines	0.3	Chayote	0.4
Mangos	0.1	Chili peppers	0.3	Guavas	0.3	Mushrooms	0.3
Pineapples	0.1	Mixed salad	0.2	Coconuts	0.1	Mixed salad	0.3
Pomegranates	0.1	Eggplants	0.2	Honeydews	0.1	Beets	0.3
Papayas	0.1	Bean sprouts	0.2	Grapefruits	0.1	Sweet potatoes	0.3
Kiwis	0.1	Asparagus	0.2	Mandarins	0.1	Radishes	0.2
Guavas	0.1	Garlic	0.2	Kiwis	0.1	Peppers	0.2
		Beets	0.2			Green onions	0.1
		Artichokes	0.2			Garlic	0.1
		Winter squash	0.2			Eggplants	0.1
		Romaine	0.1			Bean sprouts	0.1
		Swiss chard	0.1			Asparagus	0.1
		Green peas	0.1			Mustard greens	0.1
		Bay leaves	0.1			Green peas	0.1
		Pumpkins	0.1				
<b>Total: 1,136 items</b>		<b>Total: 1,262 items</b>		<b>Total: 812 items</b>		<b>Total: 950 items</b>	

<sup>a</sup>WIC=Special Supplemental Nutrition Program for Women, Infants, and Children.

to 19 years), and average family size was 3.9±1.3 people (median 4 people, range 2 to 11 people). Mean (±standard deviation) household income was \$1,233±\$654/mo (median \$1,154/month, range \$0 to \$3,640/mo). These characteristics were similar across all three sites.

In all, \$44,000 worth of vouchers were issued for the supermarket and \$44,960 for the farmers' market. Redemption rates were 90.7% for the farmers' market and 87.5% for the supermarket. The Table shows the specific fruits and vegetables reported purchased by the participants with their vouchers. These data are presented in terms of frequency, because quantities were not reported. Quantitative consumption of fruits and vegetables from the dietary recalls will be reported elsewhere.

Overall, participants reported purchasing 27 and 26 different fruits and 34 and 33 different vegetables in the farmers' market and supermarket outlets, respectively. Five fruits and five vegetables accounted for

about 70% of the items reported for each group, with only minor differences in items. The 10 most frequently reported items were oranges, apples, bananas, peaches, grapes, tomatoes, carrots, lettuce, broccoli, and potatoes. A larger number of item purchases were reported for the farmers' market condition (29% more fruits and 25% more vegetables), although the total number of types of fruits and vegetables did not differ significantly between the two conditions. With regard to the 10% of vouchers not redeemed, participants were queried at each interview about whether or not they had redeemed all their vouchers and if not, why not. Most (22.6% of unredeemed vouchers) gave responses indicating that they still intended to use remaining vouchers. The next most common response was "too busy" (16.3%). A few reported vouchers lost or stolen, or that they had no storage or working refrigerator. Responses indicating that the amount was too much to use effi-

ciently were few (2.7% "too much to spend at once," 2.3% "still have fruits and vegetables").

## DISCUSSION

Results show that a subsidy directed to fresh fruits and vegetables was almost fully used by this population and that a wide variety of fresh fruits and vegetables was purchased. With the exception of lettuce and grapes, which were among the most popular vegetables and fruits, respectively, all of the most frequently purchased items were significant sources of potassium, vitamin C, vitamin A, and/or dietary fiber—food components determined to be of high priority in revising WIC food packages by a recent Institute of Medicine study (11,14). The amount of the subsidy in this study (\$40/month) was greater than would likely be feasible in a program such as WIC (the current retail value of the food package excluding the fruit and vegetable vouchers for postpartum women in this local WIC program ranges from \$56.14 to \$76.62 depending on breastfeeding status). A higher-than-realistic level was chosen to ascertain whether the demand would be saturated at a lower level; the very high redemption rates for coupons in this study lead us to conclude that a fresh produce subsidy would be approximately fully used, at least at levels up to that provided in this study. Seasonality of fruit and vegetable intake was accounted for by enrolling participants over a 6-month period and then following up each participant for a total of 14 months. Despite a differential dropout rate at the intervention sites, use of the two supplements was almost identical. Therefore, any bias in the use of these vouchers among sites was not suspected.

## **Dietetics professionals can capitalize on the ability of WIC participants to choose fresh produce and can encourage them to include it not only in their own daily diets, but also in those of other family members.**

In terms of generalizing the results of this study to other US locations, it would probably not be expected that participants enjoy such a wide variety of fresh produce as they did in this study. However, participants nationwide would be likely to use a similar supplement to make good choices from the fresh produce that is available to them.

Lastly, neither the supermarket nor the farmers' market found the study particularly burdensome, but rather were positive about their participation. No specific barriers arose to redemption of the vouchers by participants or retailers.

## CONCLUSIONS

The variety of choices shown in this study leads us to conclude that low-income consumers make wise, varied, and nutritious choices from available produce and that the potential for dietary improvement with a targeted subsidy that allows free choice within the fresh produce

category is significant. Dietetics professionals can capitalize on the ability of WIC participants to choose fresh produce and can encourage them to include it not only in their own daily diets, but also in those of other family members. In situations in which the availability of fresh produce is limited because of seasonality, dietetics professionals can remind WIC participants of how to include frozen and canned variants to ensure the maximum intake of important vitamins, micronutrients, and fiber.

This study was supported in part by the California Cancer Research Program, California Department of Health Services, No. 00-00758K-20148; US Department of Agriculture No. 43-3AEM-1-80038 through the University of California at Davis; the National Institutes of Health through the UCLA Cancer Education and Career Development Program in the Division of Cancer Prevention and Control Research; UCLA/Jonsson Comprehensive Cancer Center (No. 5R25 CA87949) and the UCLA Clinical Nutrition Research Unit (No. 5P01CA42710); and the American Society of Nutrition Sciences, Community and Public Health Nutrition Research Interest Section.

We thank Shelley Lander and Yvette Young at the Corporate Headquarters of Food4Less in Los Angeles, CA, and Steve Whipple, Manager of the Culver City Farmers' Market, for their assistance and support in conducting this study. We are also grateful to the staff and clients at the Public Health Foundation Enterprises WIC centers, whose time and dedication made the study possible.

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1 **Title: Targeted subsidy increases FV intake among low-income women in**  
2 **the WIC program**

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5 Word count abstract: 165

6 Word count manuscript: 3,578

7 Word count references: 725

8 Number of tables: 3

9 Number of figures: 1 (a-c)

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the  
and

10 **Abstract**

11 **Objectives:** Consumption of fruits and vegetables (FVs) is protective against several common  
12 chronic diseases. Low income is associated with lower FV intakes. We tested the effectiveness  
13 of a subsidy for self-selected FVs to the WIC supplemental food package. **Methods:** Women  
14 enrolling for postpartum services (n=602) at three WIC sites in Los Angeles were included.  
15 Sites were assigned as intervention with redeemable vouchers or control a minimal non-food  
16 incentive. Interventions were carried out for six months, and participants' diets were followed  
17 for an additional six months afterwards. **Results:** Intervention participants increased their  
18 consumption of FVs and sustained the increase six months after the intervention was terminated  
19 (Model adjusted  $R^2=.13$ ,  $p<.0001$ ). Farmers' market participants showed an increase of 1.4  
20 servings/1000 kcal ( $p<.0001$ ) from baseline to the end of intervention when compared to controls  
21 and supermarket participants showed an increase of 0.8 servings/1000kcal ( $p=.02$ ).  
22 **Conclusions:** Fresh FVs are valued items and were well-utilized at levels up to four times those  
23 proposed for recent WIC food package policy changes.

24

25

25 **Introduction**

26 Fruit and vegetable (FV) intake is protective for various common chronic diseases (1),  
27 (2), (3), (4). Low income is a risk factor for poor dietary quality and for low FV consumption  
28 (1), (2), (3), (4), (5). Interventions using nutrition education to increase FV consumption have  
29 reported some successes, although the magnitude of behavior change has been modest (6).  
30 Recent analyses have drawn attention to the potential for more “upstream” strategies including  
31 policy, pricing and environmental change to affect food access and availability as well as  
32 consumer information and motivation (7).

33 Price reduction strategies to promote the choice of targeted foods by lowering their cost  
34 relative to alternatives have been little tested, likely because of the cost of implementing such  
35 strategies, but the available evidence hints of impressive impacts. Price reductions of lower fat  
36 vending machine snacks, fresh fruits and baby carrots in work sites and secondary schools have  
37 resulted in substantially increased sales of these items (8), (9), (12). Two published reports on  
38 the provision of coupons for purchase of FVs at farmers’ markets, one with low-income older  
39 adults over a five-year period (10) and the other for participants in the WIC program<sup>1</sup> in  
40 Connecticut (12) showed high levels of usage for the coupons.

41 The WIC program provides an ideal context for investigating means to improve FV  
42 consumption. It is targeted to a low-income population and is designed to improve dietary  
43 quality both through subsidizing nutrient-dense foods and through nutrition education. The WIC  
44 program was developed prior to appreciation of the relationship of FV intake to chronic disease  
45 risk, and the supplemental foods were selected to provide nutrients most limited in the diets of

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<sup>1</sup> The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is designed to provide nutritious supplemental foods, nutrition education and health care referrals for low-income and nutritionally at-risk pregnant and postpartum women, infants and children to the age of five years. The program currently reaches about half of all infants born in the US, and their mothers, and about 25% of preschool children (11).

46 women and children –protein, calcium, iron, vitamin A and vitamin C. To date, the only FVs  
47 provided have been juice (for all participants over four months of age) and fresh carrots for  
48 breastfeeding women.

49 An evaluation of nutrition education within the WIC program to increase FV  
50 consumption in Maryland (19) showed that both intervention and control participants increased  
51 consumption of FVs with intervention participants increasing their intake by more than one-half  
52 serving/day on average. Predictors of increase included number of nutrition education sessions  
53 attended, ethnicity, education and self-efficacy (13).

54 There has been considerable discussion about adding FVs to the WIC supplemental food  
55 “package”. A recent report by the Institute of Medicine (13) recommends a number of changes  
56 including the addition of FVs to the packages for all participants over six months of age (14).

57 The food package for postpartum women at the time of the present study included fluid milk,  
58 cheese, eggs, iron-fortified cereal, fruit juice, and for breastfeeding women additionally canned  
59 tuna fish and fresh carrots.

60 The present study was designed to determine whether an additional economic subsidy for  
61 fresh FVs for postpartum WIC participants would result in increased FV consumption. We  
62 tested the hypothesis that effective and sustained improvement in FV intake would result from  
63 improved economic access to fresh produce for a six-month period.

64

65

65 **Methods**

66 *Participant Recruitment and Data Collection*

67 We used a nonequivalent control group design to measure the effectiveness of two  
68 interventions to increase the consumption of fresh FVs. We recruited 602 women enrolling for  
69 WIC services at three program centers in Los Angeles, California between February and August  
70 2001. The study sites (two intervention and one control) were selected based on similarity  
71 regarding caseload, ethnic backgrounds of participants, and geographical proximity to  
72 supermarkets and farmers' markets. To ensure equal access to fresh FVs, selected centers each  
73 had a major supermarket and a year-round farmers' market within walking distance ( $\leq 1/2$  mile)  
74 from the center and reflected locations where participants usually shopped. Eligibility criteria  
75 for the individual participant women included a) recently delivered and re-certified for WIC  
76 participation as either a breastfeeding or non-breastfeeding postpartum woman; b) English or  
77 Spanish-speaking; c)  $\geq 18$  years of age. Seventy-five percent of recruited participants completed  
78 all interviews; the most frequent reason for loss to follow-up was residential relocation (15).  
79 Demographic characteristics differed slightly between participants completing the study and  
80 those lost to follow-up ( $p < .05$ )<sup>2</sup>. Rates of loss-to-follow-up were: 30% for the supermarket,  
81 16% for the Farmers Market, and 29% for the control condition.

82  
83 *The Intervention*

84 Following a two-month monitoring period to document baseline FV intake, participants  
85 at the two intervention sites were issued US \$10 worth of vouchers per week, in \$1 units for the

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<sup>2</sup> Participants who were lost to follow-up lived on average 2.4 years more in the US, had 0.3 fewer family members, and 1.2 years more education than participants who remained in the study. This group also had a slightly higher proportion of African-American and English-speaking participants.

86 supermarket site and in \$2 units for the farmers' market site, to buy produce of the participant's  
87 choice. Vouchers were issued bimonthly and could be spent over the ensuing two-month  
88 period. At the control site participants were provided with a lesser-value set of coupons  
89 (US\$13/month) redeemable for disposable diapers, in compensation for their time participating  
90 in interviews. Participants were interviewed by trained WIC nutritionists, in English or Spanish  
91 according to participants' preference, six times in the two intervention sites and four times at the  
92 control site over a period of 14 months (baseline, two months post baseline, end of six month  
93 intervention, and six months following the end of the intervention). Quantitative 24-hour dietary  
94 recalls according to the multiple pass method (16), (17) were conducted at four interviews for all  
95 participants.

96 The following data were also collected: *Household demographic variables*: age, income,  
97 household composition, ethnicity, education, marital status, language preference and country of  
98 origin (first interview, income also at final interview); *Program participation*: Medi-CAL  
99 (California's version of public health care insurance), Food Stamp Program and/or Temporary  
100 Assistance for Needy Families (recruitment and final interviews); *Pregnancy outcomes*: parity,  
101 number of weeks postpartum (recruitment interview), and infant feeding practices (all  
102 interviews). Breastfeeding status was determined by the question, "Are you currently  
103 breastfeeding?" (yes/no); *Height, Weight and Basal Metabolic Rate*: Height and weight were  
104 measured (recruitment and final interview). Basal metabolic rate (BMR) was calculated using  
105 height, weight and age. *Food security status*: Household food security status was assessed using  
106 the U.S. Food Security Survey Module (18). The initial survey assessed household food security  
107 status over the previous twelve months, and interviews at the end of the intervention and six  
108 months later covered the previous six months.

109 The study protocol was approved by the Institutional Review Boards of both UCLA and  
110 Public Health Foundation Enterprises, Inc. (PHFE).

### 111 **Data Analysis**

112 Dietary data were entered into the Food Intake Analysis System (FIAS) (University of  
113 Texas and USDA, Version 3.99). Recipes were disaggregated into component food parts and  
114 FVs converted to standard serving sizes using the same methods outlined by USDA for analysis  
115 of national food consumption data (16, 17), (19) . A variable to capture infant feeding practice  
116 was created as follows: exclusively breast milk, exclusively formula, combination breast milk  
117 and formula. BMI was calculated as weight (kg) divided by height (m<sup>2</sup>). BMR was calculated  
118 using the following formula (20), (21):

$$119 \quad BMR = 655 + (9.6 \times \text{weight in kg}) + (1.8 \times \text{height in cm}) - (4.7 \times \text{age in years})$$

120 Estimated energy intake (EI) in kilocalories (from the baseline interview) was divided by BMR  
121 to calculate EI:BMR ratio, which was used as a criterion for the completeness of dietary EI  
122 estimates (22), (23). A cut-off value of 0.92 BMR has been widely used as a conservative value  
123 for minimum plausible intakes based on a single 24-hour recall for adults maintaining their  
124 weights (24).

125 Households were classified as food secure, food insecure without hunger, food insecure  
126 with hunger, or food insecure with severe hunger according to the Guide for Measuring  
127 Household Food Security (25).

128

### 129 **Analyses**

130 Initial analyses were performed with SPSS for Windows (Version 11.0). Descriptive  
131 statistics were calculated and analysis of variance, Pearson's product moment correlations, and

132 paired t-tests were used for bivariate analyses. Linear regression analysis was conducted to  
133 identify predictors of FV intake six months post-intervention. FV intake at baseline was  
134 compared with intake 2 months postpartum but the difference was not significantly different and  
135 the baseline values were retained for modeling.

136 *Mixed models.*

137 A mixed model approach was used to detect the change in FV intake at the end of the  
138 intervention periods and six months after incentives were removed. This approach takes into  
139 account the intra-subject correlation and adjusts for covariates. The outcome data were the  
140 longitudinal values at baseline, at the end of the intervention period, and 6 months post-  
141 intervention. These analyses were conducted with SAS for Windows (Version 8.2). The mixed  
142 model is written as:

$$Y = X\beta + Z\gamma + \varepsilon$$

143 where  $y$  denotes the vector of observed values,  $X$  is the known fixed effects design matrix, and  $\beta$   
144 is the unknown fixed effects parameter vector.  $Z\gamma$  represents the additional random component  
145 of the mixed model. Here,  $Z$  is the known random effects design matrix,  $\gamma$  is a vector of  
146 unknown random-effects variables and  $\varepsilon$  is the unobserved vector of independent and identically  
147 distributed Gaussian random errors. We used a random intercept approach allowing each  
148 participant to have her own random intercept. For the longitudinal autocorrelation, we compared  
149 an autoregressive to an equi-correlated pattern. The results were not significantly different from  
150 each other; we therefore used the equi-correlated pattern in all of the mixed models.

152 The intervention site and time since the baseline interview were included in the models as  
153 fixed effects. We used indicator variables for the intervention sites and for time at the end of the

154 intervention as well as for 6 months later. Interaction variables for intervention site and time  
155 were also included.

156 Predictor variables in the model building process included participant age, income,  
157 language preference, ethnicity, family size, years living in the United States, government  
158 program participation (Medi-CAL, Food Stamps, TANF), number of years as a WIC participant,  
159 infant feeding method, BMI, food security status, and treatment (Farmers Market, Supermarket  
160 versus control). Energy intake was included as a control variable. Statistical tests were  
161 conducted with total FV intake including beans and potatoes, FV intake excluding beans and  
162 potatoes, and FV intake excluding juices as outcomes. Results are shown for FV intake  
163 including beans, potatoes and juices unless otherwise specified. Multiple  $R^2$  was computed as the  
164 proportion of reduction in the estimated total variance from the null model, where only the  
165 random intercepts are used, to the full model where all the covariates are included. The  
166 significance of the full model was based on the chi square statistic computed as the difference of  
167 ( $-2 \log$  likelihood) for the null and full models.

168

## 169 **Results**

### 170 *Sample*

171 Demographic characteristics approximated those of the WIC program in Los Angeles,  
172 with 89.1% Hispanic, 5.9 % African American, 2.9% non-Hispanic white, 1.9% Asian-American  
173 and 0.2% Native American. The average age was 27.5 years (range 17-43 years), average  
174 educational level was  $9.3 \pm 3.2$  years (range 0-16 years) and average family size was  $4.0 \pm 1.3$   
175 persons (range 2-11). Mean ( $\pm$  sd) household income was US\$  $1,233 \pm 617$ /month (range US\$ 0  
176  $- 3,120$ /mo). Participants had lived in the US for an average of  $12.5 \pm 9.5$  years and participated

177 in the WIC program on average 2.8 years. BMI averaged approximately 28 kg/m<sup>2</sup>. These  
178 characteristics were similar across all three sites (Table 1). Average energy intake (EI) was  
179 highest at baseline and decreased over the course of the study. EI:BMR ratio was 1.58 ± .64 on  
180 average. This ratio was significantly lower for the control site when compared to both of the  
181 intervention sites but was within the range of normal values as described by Goldberg et al of  
182 studies of adults in affluent societies (24). Approximately one-third of study participants  
183 exclusively breastfed their infants at study entry. Participants at the Farmers Market site had  
184 higher rates of exclusive breastfeeding than either the supermarket or control site as well as rates  
185 of MediCAL participation and food security.

186

#### 187 *Consumption of FVs*

188 Consumption of total FVs increased over the course of the study. At baseline,  
189 participants at the farmers market site reported eating 2.2 servings/1000 kcal (5.4 servings total)  
190 on average, at the supermarket site 2.9 servings/1000 kcal (6.9 servings total) and at the control  
191 site 2.6 servings/1000kcal (5.0 servings total)<sup>4</sup>. The difference between the intervention sites and  
192 the control site was not statistically significant when controlled for energy intake. Figure 1a  
193 shows absolute values of average FV consumption for the three sites over the course of the  
194 study.

195 At the end of the intervention participants at the farmers market reported consuming 3.9  
196 servings of FVs/1000 kcal on average (7.8 servings total), at the supermarket 4.1 servings/1000  
197 kcal (7.8 servings total, identical to farmers market), and at the control site 3.0 servings/1000

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<sup>4</sup> According to the National Center for Health Statistics, National Health and Nutrition Examination Survey, average consumption of FVs for the US population in 2001 was 4.8 servings per day (26). This study focuses on postpartum women, who are more likely to have a baseline consumption rate higher than the national average. In addition, the national average includes young children and men who tend to consumer fewer FVs.

198 kcal (4.8 servings total). Each intervention site was significantly different from the control site  
199 ( $F=9.75$ ,  $p<.0001$ ). We adjusted for multiple comparisons using the Bonferroni method and the  
200 results remained the same. Six months post-intervention, the increase in FV intake reported by  
201 participants at the intervention sites was sustained and was statistically significant ( $F=6.66$ ,  
202  $p=.001$ ). The pattern of differences between the intervention sites (increased consumption) and  
203 control site (little change) was the same when evaluating consumption of FVs excluding beans  
204 and potatoes and FVs excluding juices.

205 For fruits alone there was no significant difference in consumption of servings of  
206 fruits/1000kcal between the two intervention sites and the control site at baseline. At the end of  
207 the intervention, there was still no statistically significant difference between the intervention  
208 sites and the control site in terms of fruit consumption ( $F=.95$ ,  $p=.39$ ). This consumption pattern  
209 remained the same six months post-intervention. Figure 1b depicts absolute consumption of  
210 fruits alone by site over the course of the study.

211 Vegetable consumption alone at the control site at baseline was significantly higher than  
212 at the farmers market but not at the supermarket site. When beans and potatoes were removed  
213 from the total number of vegetables consumed, there was no difference in the pattern of average  
214 consumption of servings of vegetables/1000 kcal at the intervention and control sites ( $F=1.7$ ,  
215  $p=0.18$ ). At the end of the intervention, both of the intervention sites reported eating more  
216 servings of vegetables/1000 kcal on average than the control site and this difference was  
217 statistically significant ( $F=11.0$ ,  $p<.0001$ ) We adjusted for multiple comparisons and found that  
218 the significant result remained. The farmers market site reported eating 2.1 servings of  
219 vegetables/1000 kcal on average (4.2 servings total), the supermarket site 2.3 servings/1000 kcal  
220 on average (4.4 servings total) and the control site 1.5 servings/1000 kcal on average (2.5

221 servings total). The pattern of results was similar for consumption of vegetables excluding beans  
222 and potatoes ( $F=8.33$ ,  $p<.0001$ ). Figure 1c shows consumption of vegetables alone by site over  
223 the course of the study.

224 Six months post-intervention, both of the intervention sites sustained higher average  
225 intakes of vegetables/1000 kcal compared to the control site. However, after adjusting for  
226 multiple statistical comparisons, the difference was only significant for the supermarket  
227 compared to the control site (mean difference control vs farmers market =  $-.40$ ,  $p=.13$ ; mean  
228 difference control vs supermarket =  $-.59$ ,  $p=.01$ ). When beans and potatoes were excluded from  
229 the average servings of vegetables consumed/1000 kcal, both of the intervention sites had higher  
230 consumption of vegetables relative to the control site (mean difference control vs farmers market  
231 =  $-.81$ ,  $p=.007$ ; control vs supermarket mean difference =  $-.75$ ,  $p=.023$ ; after adjusting for  
232 multiple comparisons).

233

#### 234 *Factors Associated with Sustaining FV Consumption*

235 Higher reported intake of FVs six months post-intervention was associated with higher  
236 reported FV intake at baseline, preference for speaking Spanish, and either the farmers market  
237 site or the supermarket site (Table 2). This model explained 14% of the variance ( $p<.0001$ ).

#### 238 *Mixed Models*

239

240 Mixed models were utilized to determine if there were sustained differences over time in  
241 consumption of FVs, fruits alone and vegetables alone. We used the same set of covariates as  
242 for the linear regression model. Results for FVs together (13% of the variance explained,  
243  $p<.0001$ ) showed an increase of 1.4 servings/1000 kcal from baseline to the end of the  
244 intervention for the farmers market versus the control site and an increase of 0.8 servings/1000

245 kcal for the supermarket versus the control site (Table 3). There was also a significant increase  
246 of 1.15 servings/1000 kcal from baseline to six months post-intervention.

247 There was a significant increase in fruit consumption of 0.51 servings/1000 kcal from  
248 baseline to the end of the intervention for the farmers market relative to the control and this  
249 increase was sustained six months post-intervention (data not shown). The results for the  
250 supermarket were not significantly different from the control condition for either of these time  
251 periods for fruit consumption. Individuals who most recently immigrated tended to consume  
252 more servings of fruits than others (marginally significant at  $p=0.05$ ).

253 Vegetable consumption showed a significant increase from baseline both to the  
254 intervention end and to six months post-intervention (data not shown). There was an increase of  
255 0.89 servings/1000 kcal for the farmers market condition relative to the control ( $p<0.001$ ) and  
256 0.57 servings/1000 kcal for the supermarket condition relative to the control ( $p=0.02$ ) at the  
257 intervention end. The farmers market condition also showed an increase of 0.65 servings/1000  
258 kcal over the control six months post-intervention ( $p<0.01$ ) but the supermarket condition  
259 showed no statistical increase. Participants who were older, ( $p=0.05$ ) bottle fed their infants six  
260 months post-intervention ( $p<0.01$ ), and were either African-American or Caucasian ( $p=0.05$ )  
261 also showed higher consumption of vegetables.

## 262 Discussion

263 The targeted subsidy increased FV intake in both of the treatment conditions and the  
264 increase was sustained six months following the end of the intervention. Increases in FV intake  
265 were primarily realized by increases in consumption of vegetables.

266 African-American and Caucasian participants (English-speakers) showed greater  
267 increases in vegetable consumption while Hispanics showed greater increases in fruits. This

268 finding is similar to results from a previous study we conducted in this population, where  
269 African-Americans who had participated for the first-time in the WIC program reported  
270 increasing their consumption of vegetables, in particular leafy, green vegetables (27).

271 Spanish language preference was one of the key factors predicting FV intake and was  
272 more indicative than either ethnicity or time spent in the US. We speculate that this may be  
273 because individuals who live in neighborhoods where their native language is the primary one  
274 spoken are more likely to maintain their cultural eating habits and customs. These  
275 neighborhoods are also more likely to have ethnic grocery stores to purchase ethnic items.

276 Although we do not have quantitative data to explain why Farmers Market participants  
277 consume higher FV than supermarket participants, individual reports indicate perceived higher  
278 quality and freshness of produce at the Farmers Market. Participants who purchased their  
279 produce at the Farmers Market also mentioned enjoying the pleasant "community experience" of  
280 meeting friends while shopping and interacting directly with growers.

281 This study had several limitations. The sample was not representative of WIC  
282 participants at the national or state levels. However, the sample is reflective of the ethnic make-  
283 up of the WIC program studied and the demographics of each of the study sites were similar.

284 Participants at the control site reported lower energy intakes (EI) than either of the  
285 intervention sites, although the intakes at every site were within the range considered accept able  
286 in terms of plausibility (24). We have nevertheless reported servings of FV controlled for energy  
287 intake as well as in absolute number of servings.

288 Finally, our intervention was placed in an environment characterized by a wide variety of  
289 fresh FVs available year-round. If such a program was to be implemented in other settings, other

290 forms of FVs would have to be considered such as frozen and canned in order to accommodate  
291 seasonal variation.

292 We found that postpartum WIC participants who were given a \$10 voucher/week for six  
293 months to purchase fresh FVs at either a local year-round farmers market or a supermarket  
294 increased their FV intake and maintained that increase six months after the economic subsidy  
295 was removed. As we have reported previously (15), participants redeemed more than 90 percent  
296 of the coupons and purchased a wide variety of fresh FVs. Spanish language preference and age  
297 were the only sample characteristics that were associated with maintaining a higher intake of  
298 FVs over time. Income, ethnicity, family size, education, number of years residing in the U.S.,  
299 government assistance program participation, number of years as a WIC participant, infant  
300 feeding method, BMI and food security status were not related to sustaining FV intake over time.

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301 The recent Institute of Medicine recommendations for change in the WIC food packages  
302 (17) include a similar mechanism for adding FVs in the form of cash-value vouchers for fresh  
303 produce but with provision for canned or frozen forms of FVs in environments where that is  
304 more practical. The requirement that revisions to the food packages not result in increased cost  
305 to the program dictated that the amounts recommended are substantially lower than we used in  
306 this study -\$10/month for adult women and \$8/month for young children. Based on our results,  
307 we might expect that these amounts translate to an additional one to two servings/day if the  
308 produce were consumed solely by the designated participant. However, because the items  
309 purchased with the coupons become part of the family food supply, we may expect that the  
310 change for the individual participant will be smaller. Indeed, in the present study with a subsidy  
311 about four times that proposed in the revision to the food packages, adult women participants  
312 increased their intakes by about 1 serving/1000 kcal, or about two servings/day for a woman

313 consuming 2000 kcal. The almost complete utilization of the coupons by our study participants  
314 supports the conclusion that fresh FVs are valued items and suggests that the recommendations  
315 of the IOM to add fresh FVs to the WIC food packages will result in the desired outcome of  
316 increasing FV consumption.

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318           **Acknowledgements**

319           We thank Shelley Lander and Yvette Young at the Corporate Headquarters of Food4Less  
320           in Los Angeles, CA and Steve Whipple, Manager of the Culver City Farmers Market for their  
321           assistance and support in conducting this study. We are also grateful to the staff and clients at  
322           the Public Health Foundation Enterprises WIC centers whose time and dedication made the  
323           study possible. The study was supported in part by the California Cancer Research Program,  
324           California Department of Health Services, #00-00758K-20148, USDA #43-3AEM-1-80038  
325           through the University of California at Davis, and the National Institutes of Health through the  
326           UCLA Cancer Education and Career Development Program in the Division of Cancer Prevention  
327           and Control Research, UCLA/Jonsson Comprehensive Cancer Center (#5R25 CA87949) and the  
328           UCLA Clinical Nutrition Research Unit (#5PO1CA42710).

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Table 1 Analytical Sample Characteristics at Baseline

	Total Sample (n=451)	Farmers Market (n=168)	Supermarket (n=140)	Control (n=143)
	Mean $\pm$ SD (min - max)			
Age (yrs)	27.5 $\pm$ 5.8 (17-43)	27.3 $\pm$ 5.6 (17-43)	27.8 $\pm$ 6.0 (18-40)	27.4 $\pm$ 5.9 (17-43)
Education (yrs)	9.3 $\pm$ 3.2 (0-16)	9.1 $\pm$ 3.4 (0-16)	9.6 $\pm$ 3.0 (0-15)	9.1 $\pm$ 3.2 (1-16)
Income (US\$/month)	1,233 $\pm$ 617 (0-3,120)	1,179 $\pm$ 584 (0-2,958)	1,289 $\pm$ 652 (0-3,120)	1,243 $\pm$ 618 (0-3,068)
Family size (persons)*	4.0 $\pm$ 1.3 (2-11)	3.8 $\pm$ 1.2 (2-8)	4.1 $\pm$ 1.4 (2-11)	4.3 $\pm$ 1.3 (2-9)
Years in U.S.	12.5 $\pm$ 9.5 (1-40)	12.2 $\pm$ 9.8 (1-37)	12.3 $\pm$ 9.8 (1-40)	13.0 $\pm$ 9.1 (1-37)
Years on WIC	2.8 $\pm$ 3.0 (0-16)	2.6 $\pm$ 3.1 (0-16)	2.8 $\pm$ 2.9 (0-16)	2.9 $\pm$ 2.9 (0-13)
BMI (kg/m <sup>2</sup> )	28.1 $\pm$ 5.0 (16.9-48.2)	27.9 $\pm$ 4.9 (20.0-48.2)	28.0 $\pm$ 4.8 (16.9-44.0)	28.4 $\pm$ 5.2 (20.1-45.7)
EI at baseline <sup>†,*</sup>	2,348 $\pm$ 898 (364-5,889)	2,550 $\pm$ 920 (364-5,781)	2,392 $\pm$ 837 (487-5,889)	2,065 $\pm$ 864 (462-5,524)
EI at end of intervention <sup>†,*</sup>	1,900 $\pm$ 768 (315-5,084)	2,029 $\pm$ 801 (538-5,084)	1,965 $\pm$ 757 (538-4,772)	1,685 $\pm$ 693 (315-4,258)
EI 6 months post intervention <sup>†,*</sup>	1,837 $\pm$ 729 (195-5,167)	1,984 $\pm$ 777 (217-5,167)	1,889 $\pm$ 701 (560-4,018)	1,612 $\pm$ 642 (195-3,262)
EI:BMR ratio *	1.6 $\pm$ .64 (.23-4.2)	1.7 $\pm$ .66 (.23-3.9)	1.6 $\pm$ .60 (.28-4.2)	1.4 $\pm$ .60 (.29-3.9)
	Percent (%)			
Ethnicity				
Hispanic	89.1	86.2	88.9	92.3
African-American	5.9	6.9	7.4	3.5
Non-Hispanic White	2.8	4.1	1.5	2.8
Asian-American	1.9	2.1	2.2	1.4
Native American	0.2	0.7	---	---
Language preference				

Spanish	70.7	68.5	75.5	68.5
English	29.1	30.9	24.5	31.5
No preference	0.2	0.6	---	---
Marital status				
Married	77.6	80.4	72.9	79.0
Not married	22.4	19.6	27.1	21.0
Infant feeding practice **				
Exclusive breastmilk	30.2	46.3	22.8	18.9
Formula	27.8	15.9	30.1	39.2
Combination of both	42.0	37.8	47.1	42.0
Medi-CAL participant ***				
Yes	68.4	74.9	67.1	62.2
No	31.6	25.1	32.9	37.8
Food security status at baseline **				
Food secure	39.4	48.8	30.6	36.6
Food insecure	60.6	51.2	69.4	63.4

- 410 \* Statistically significant difference between treatment groups based on F-test,  $p < .001$
- 411 \*\* Statistically significant difference between treatment groups based on Chi-square test,
- 412  $p < .01$
- 413 \*\*\* Statistical difference between treatment groups based on Chi-square test,  $p = .05$
- 414 † EI is the abbreviation for energy intake
- 415
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416 Table 2 Factors Associated with Sustaining FV (FV) Intake 6 Months Post-Intervention\*

	Coefficient	Std. Error	p-value	95% CI
<b>FV intake **</b>	<b>.32</b>	<b>.07</b>	<b>&lt;.0001</b>	<b>.19 - .45</b>
Energy intake	-.0002	.00	.51	-.001-.000
Age	.03	.05	.55	-.07-.12
Education	.02	.08	.81	-.14-.19
Income	.0004	.00	.26	.000-.001
<b>Spanish language</b>	<b>2.04</b>	<b>.88</b>	<b>.02</b>	<b>.30-3.78</b>
Latino	.29	1.48	.84	-2.6-3.2
Family size	-.02	.25	.93	-.51-.47
Years in U.S.	.008	.05	.86	-.09-.10
Medi-CAL***	.62	.46	.17	-.28-1.53
Years on WIC	-.02	.09	.87	-.20-.17
Infant feeding method	.06	.61	.92	-1.13-1.25
BMI	-.02	.06	.62	-.14-.08
Food secure	.43	.53	.41	-.61-1.47
<b>Treatment – Farmers Market</b>	<b>2.26</b>	<b>.60</b>	<b>&lt;.0001</b>	<b>1.07-3.44</b>
<b>Treatment – Supermarket</b>	<b>1.63</b>	<b>.63</b>	<b>.01</b>	<b>.39-2.86</b>

417 \* Model adjusted R<sup>2</sup>=.14, p<.0001;  
 418 \*\* All independent variables are from baseline unless otherwise noted.  
 419 \*\*\* Food stamp participation and TANF included in model but NS. Results for FVs without  
 420 beans and potatoes are the same except Treatment-Supermarket p=.05.  
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425 Table 3 Longitudinal Comparison of FV (FV) Intake at the End of the  
 426 Intervention Period and 6 months Post Intervention with Intake at Baseline\*

	Coefficient	Std. Error	t	p-value
<b>Age</b>	<b>.04</b>	<b>.01</b>	<b>2.38</b>	<b>.02</b>
Education	-.002	.03	-.07	.94
Income	-.00005	.0001	-.37	.71
<b>Spanish language</b>	<b>.51</b>	<b>.26</b>	<b>1.97</b>	<b>.05</b>
Latino	-.16	.32	-.52	.61
Family size	.01	.08	.12	.91
Years in U.S.	-.02	.01	-1.58	.11
Medi-CAL	.09	.18	.50	.62
Years on WIC	-.04	.03	-1.06	.30
<b>Infant feeding method</b>	<b>-.54</b>	<b>.19</b>	<b>-2.85</b>	<b>&lt;.01</b>
Food secure	-.29	.17	-1.76	.08
Treatment – Farmers Market (FM)	-.27	.27	-.97	.33
Treatment – Supermarket (SM)	.25	.28	.92	.36
End of intervention (t2)	.20	.24	.86	.39
Six months post-intervention (t3)	.45	.24	1.91	.06
<b>FM * t2</b>	<b>1.40</b>	<b>.33</b>	<b>4.20</b>	<b>&lt;.0001</b>
<b>SM * t2</b>	<b>.81</b>	<b>.34</b>	<b>2.33</b>	<b>.02</b>
<b>FM * t3</b>	<b>1.15</b>	<b>.33</b>	<b>3.45</b>	<b>&lt;.001</b>
<b>SM * t3</b>	<b>.54</b>	<b>.34</b>	<b>1.56</b>	<b>.12</b>

\* Model adjusted R<sup>2</sup>=.13, p<.0001

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Figure 1 a  
Average Consumption of Fruits and Vegetables at Baseline, End of Intervention and 6 months Post-Intervention by Treatment

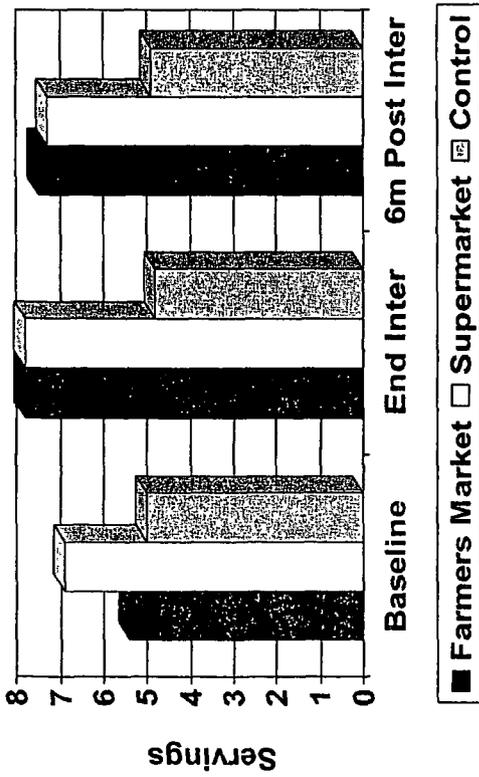


Figure 1 b  
Average Consumption of Fruits at Baseline, End of Intervention and 6 months Post-Intervention by Treatment

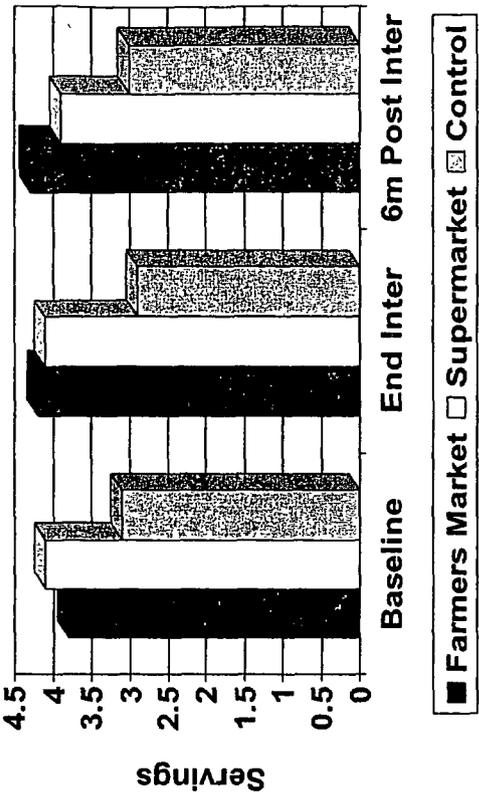
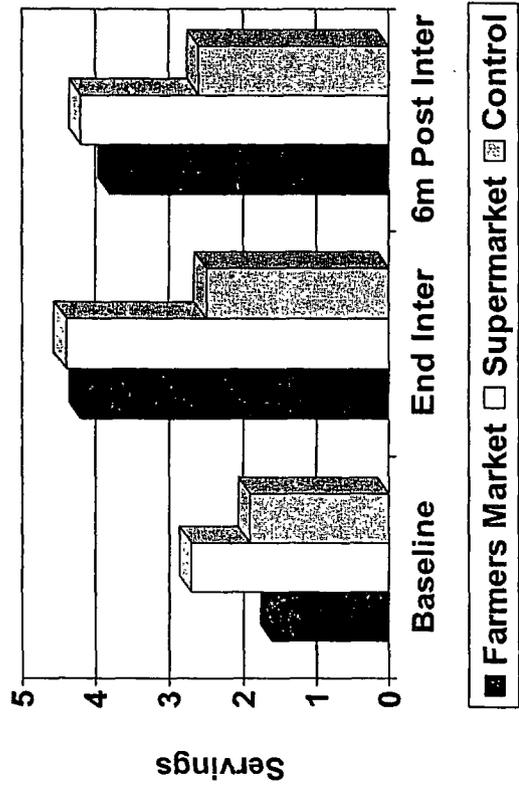


Figure 1c  
Average Consumption of Vegetables at Baseline, End of Intervention and 6 months Post-Intervention by Treatment





SCHOOL OF PUBLIC HEALTH  
P.O. BOX 951772  
LOS ANGELES, CA 90095-1772

November 4, 2006

Patricia Daniels  
Director, Supplemental Food Programs Division  
Food and Nutrition Service, US Department of Agriculture  
3101 Park Center Drive, Room 528  
Alexandria, VA 22302

Re: Docket ID Number: 0584-AD77-WIC Food Packages Rule

Dear Ms. Daniels:

I am writing to express my very strong support for the proposed rule to change the Special Supplemental Nutrition Program for Women, Infants and Children food packages; to commend USDA for your approach thus far; and to urge that the final rule be published early in 2007. I also have a few specific comments and suggestions.

First, it is entirely appropriate that you have proposed adopting the IOM Committee's recommendations for new packages pretty much entirely. I was a member of that Committee, and want to reinforce that the design of the IOM recommendations was very consciously based on an evidence-based analysis of needs and options; that the specific recommendations are interdependent; and taken as a whole will bring the WIC food packages into line with US Dietary Guidelines, nutrient needs of the WIC population, and pediatric nutrition guidelines of the American Academy of Pediatrics. The new packages will make WIC nutrition education more effective by making it congruent with the food prescriptions. And given the very large proportion of pregnant and new mothers, infants and children served, the newly re-designed food packages should serve to measurably improve the health of the next generation.

Second, and this is very important in my opinion, I would urge you to reconsider the plan for pilot testing of the partially breastfeeding package. Such piloting would significantly delay implementation of this change, which I believe to be firmly supported in evidence that use of formula in the first few weeks inhibits the successful establishment of lactation and is a risk factor for reducing breastfeeding duration. As mentioned and urged by the National WIC Association in their comment on the proposed rule, states can be given the option to establish criteria under which infant formula can be provided in the first month to breastfeeding mother/infant pairs. This will provide flexibility where it is needed without delaying the implementation of the general provision, which I am convinced will work in the direction of supporting breastfeeding. Evaluation of the effects of the revised packages on breastfeeding initiation rates and duration can be accomplished with creatively utilizing the inevitable variation in timing of adoption of the new packages by state agencies.



SCHOOL OF PUBLIC HEALTH  
P.O. BOX 951772  
LOS ANGELES, CA 90095-1772

Patricia Daniels  
November 4, 2006  
Page 2

Third, I understand that the proposed implementation of fruit and vegetable vouchers at the levels of \$6/month for children and \$8/month for women, rather than \$8 and \$10 as proposed by the IOM, is for cost containment reasons. I would urge that the funding be found somehow to restore the recommended levels; I realize that you have constraints, but the amount we are talking about is very small in relation to the overall program and certainly in relation to the federal budget. The research (mentioned in the proposed rule) which I and others carried out with adding vouchers worth ten times as much as IOM proposal, namely \$10/week for WIC participant women, resulted in almost total utilization of the vouchers, purchase of a wide variety of fresh fruits and vegetables, and improvement fruit and vegetable intake that was sustained for at least six months after discontinuation of the intervention. That work is now published and in press, and therefore can be cited. The redemption rate and variety of items purchased was published in the May 2006 *Journal of the American Dietetic Association*, and the main outcomes paper describing increases and sustainability of fruit and vegetable consumption is now in press in the *American Journal of Public Health*. I am attaching pdf files of both papers to this message for any use you may be able to make of them.

Fourth, I want to explicitly support the reductions in quantities of milk, eggs, cheese and juice proposed for the new packages, and the use of only nonfat or low-fat milk for all participants over the age of two years. The amounts and types of these foods proposed are entirely consistent with current dietary guidance, and the reductions make financial room for the increased fruits and vegetables, infant meats, and variety in children's and women's packages.

And last, I must confess a minor disappointment that low-fat yogurt, recommended by the IOM committee as a milk substitute, is not included in the proposed rule. I understand that the reason was cost containment. However, so many of the comments to the IOM committee during our deliberations stressed this to be a desirable thing that I think omitting it is a mistake. It is a nutritionally sound substitute, and so highly desirable for many adult women that its inclusion might actually improve intakes of calcium and related nutrients. As in the case of the reduced value for the fruit and vegetable vouchers, the amount of money involved here is small in the overall picture.

Thank you for the opportunity to comment on the proposed rule. I sincerely hope that the permanent rule will follow in a very short period of time.

Sincerely,

Gail G. Harrison, PhD  
Professor, Department of Community Health Sciences

UNIVERSITY OF CALIFORNIA, LOS ANGELES

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



UCLA

SANTA BARBARA • SANTA CRUZ

SCHOOL OF PUBLIC HEALTH  
P.O. BOX 951772  
LOS ANGELES, CA 90095-1772

Associate Dean for Academic Affairs  
Senior Research Scientist, UCLA Center for Health Policy Research

Sincerely,

*Gail G. Harrison*

Gail G. Harrison

HP-374

From: Curley, Susan [SCURLEY1@PARTNERS.ORG]  
Sent: Tuesday, October 17, 2006 3:27 PM  
To: WICHQ-SFPD  
Subject: Exciting Changes to WIC food packages!

To Whom It May Concern,

I am writing on behalf of the patients I see at MGH Revere Healthcare Center who receive WIC. I am a Child Development Specialist who works with children ages birth to three and their families. Discussing good nutrition and healthy eating is a large part of my work.

I was so happy to see the proposed changes to the WIC packages. Especially the decrease in juice, fresh fruit and vegetables allowance, and use of whole grains. I hope you will put these changes into practice! The young families we serve would benefit immensely from the new guidelines.

Sincerely,  
Susan Curley, MSEd/CLC

HP-375

From: Robert Pendergrast [rpenderg@mail.mcg.edu]  
Sent: Thursday, October 19, 2006 1:56 PM  
To: WICHQ-SFPD  
Subject: Docket ID Number: 0584-AD77-WIC Food Packages Rule

Docket ID Number: 0584-AD77-WIC Food Packages Rule

To whom it may concern:

I am writing to express my professional support for the proposed rule to change the Special Supplemental Nutrition Program for Women, Infants and Children food packages. I am a general pediatrician in academic practice in Georgia for the last 19 years. The proposed changes will greatly benefit vulnerable mothers and children.

I am pleased that the proposed rule closely reflects the science-based recommendations of the Institute of Medicine published in their April 2005 report entitled, WIC Food Packages: Time for a Change. The changes reflected in the proposed rule are also consistent with the 2005 Dietary Guidelines for Americans and national nutrition guidance including those from the American Academy of Pediatrics.

The changes in the proposed rule are a significant step forward and will improve the overall health of WIC mothers and children by contributing to reductions in obesity and other diet-related chronic diseases. In particular:

- I support adding fruits and vegetables to the food packages of women, infants and children while reducing the amount of fruit juice provided. Increased consumption of fruits and vegetables is associated with reduced risk for obesity and chronic diseases such as cancer, stroke, cardiovascular disease, and type 2 diabetes. Fruits and vegetables added to the diet also promote adequate intake of priority nutrients such as Vitamins A, C, folate, potassium and fiber.
- I support the quantities of dairy products and eggs offered in the proposed rule. These quantities meet the 2005 Dietary Guidelines for Americans. We agree that alternative calcium sources such as soy beverage (soy milk) and tofu are necessary additions to the food packages to address milk protein allergy, lactose maldigestion, personal preferences, and cultural diversity of the WIC population.
- I support the whole grain requirement for cereals and the introduction of whole grain bread and other whole grains such as corn tortillas and brown rice. Whole grain consumption is associated with 1). reducing the risk of coronary heart disease, type 2 diabetes, digestive system and hormone-related cancers, 2). assisting in maintaining a healthy weight, and 3). increasing the intake of dietary fiber.

While I commend USDA's efforts in the proposed rule to support the initiation and duration of breastfeeding, we urge that there be no test period for the partially breastfeeding food packages for women and infants. We believe that deletion of the pilot phase would speed the implementation of these packages. For women who declare themselves as breastfeeding moms, we urge that, consistent with the IOM recommendation, States be given the option to establish criteria under which infant formula may be provided in the first month.

To further support breastfeeding, I urge that the cash-value vouchers for fruits and vegetables for fully breastfeeding women be increased to \$10. We believe that this change would be cost-neutral and a significant incentive for breastfeeding mothers.

WIC is our nation's premier public health nutrition program. The long-term benefits of providing participants with fruits and vegetables, lower fat dairy products and whole grains, as well as additional incentives for fully breastfeeding women will greatly aid WIC in improving the life-long health of our most vulnerable women, infants and children.

Thank you,

Robert Pendergrast, MD, MPH  
Associate Professor of Pediatrics  
Medical College of Georgia