Dairy Foods and Your School Wellness Policy

Wellness Policies … Coming to a School Near You!

By the 2006-07 school year, every school in the federal meal programs must develop a policy for (1) nutrition education, (2) physical activity and (3) nutrition guidelines for all foods sold on campus (not just in the cafeteria). Congress required wellness policies in a 2004 law dealing with child nutrition programs.[1] But lawmakers left it up to local school authorities to develop the policies. In other words, each school must have guidelines for foods it sells – but it's up to the school what those guidelines are. (Of course, federal standards for school meals and similar regulations remain in place).

Milk's on Our Mind

At the National Dairy Council, we spend a lot of time thinking about both milk and wellness. Since 1916, our mission has always gone beyond just promoting milk (although we're proud of what we do to increase milk consumption!) – we've stressed balanced diets, the need for physical activity and other aspects of wellness.

Milk can and should be an important part of a wellness policy, and a strategy for achieving your wellness goals. School is where many students get virtually their entire dairy consumption for the day. NDC would like to help make milk work in schools!

Why Milk?

Milk is a nutrient-rich powerhouse. **Three daily servings** of dairy – as recommended by the 2005 Dietary Guidelines for Americans – provide a major portion of the Daily Value for critical nutrients: for **calcium,** 90%; **potassium,** 33%; **magnesium,** 24%; **Vitamin A,** 30%; **phosphorus,** 60%; **protein,** 48%; **Vitamin D,** 75%; **Vitamin B12,** 39%; and **riboflavin,** 72%.[2]

That's why major medical and health professional groups like the American Academy of Family Physicians, American Academy of Pediatrics, American Dietetic Association and the National Medical Association support 3-A-Day of Dairy.[3] And Congress agrees. The same law that requires school wellness policies also continues to require that milk be offered with school meals. Schools now have complete flexibility on which fat varieties of milk they offer, as long as they provide a variety to students. Congress also encouraged schools to offer flavored and lactose-free milk.[4]

Meeting a Need

Milk deserves attention in a wellness policy because **kids need more milk!** At the same time that childhood obesity has been on the rise, milk consumption has been on the decline.[5]

Among kids 6-11, 71% of girls and 62% of boys don't meet calcium requirements.[6] Among adolescents 12-19, it's even worse – 68% of males and 88% of females don't meet calcium requirements! Now is when young people need dairy's unique nutrient package for their growth and development. Dairy's health benefits throughout life include **bone health, lower risk of hypertension** (high blood pressure) and, as new science increasingly shows, a **healthy weight level.**[7]

Dairy foods are a **naturally nutrient-rich** way to promote wellness. Dairy contributes only 9% of calories in the nation's food supply, but 72% of the calcium.[8] And it's not just calcium – for example, the need for more potassium was a big reason the new Dietary Guidelines **increased the number of dairy servings suggested for most Americans.**[9]

Nuts and Bolts

To best meet children's nutritional needs, there are real-life choices and tradeoffs to be made in schools. How to get kids to drink more milk, and eat more fruits and vegetables? What would policy changes in snack food choices mean for school revenue? What kind of wellness policies will help schools change outcomes?

A wellness policy should not be a document in somebody's file cabinet. It needs to work – to make a difference. A wellness policy should be designed to promote better nutrition … and also be practical, recognizing a school's current situation. A real-world policy is what schools need.

State and regional dairy council representatives are ready with ideas … technical assistance … practical support. They would like to be a resource to help craft a wellness policy that's both visionary and workable.

Here are a few ideas for how milk can help make a wellness policy work.

Make Higher Milk Consumption a Strategic Goal

Design a wellness policy to **encourage more dairy product consumption.** Promoting healthy dairy products – not just in the cafeteria but through vending and a la carte sales – is a good way to reduce consumption of empty-calorie beverages. And milk is a marker for a healthy diet: Milk consumers tend to eat healthy throughout the day.

- Among children 4-18 whose health was measured in the massive NHANES study, milk drinkers had significantly lower body weight and body mass index (BMI) than children who didn't drink milk. In these same groups, "bad" cholesterol (LDL) was significantly lower among milk drinkers, even though milk contains some saturated fat.[10]

Improve School Meal Program Participation Through Milk's New Look!

Many studies have shown that students who eat in the cafeteria have better diets – they get more fruits, vegetables, whole grains and other healthy foods (besides, of course, more milk!).[11] **Shouldn't a measurable increase in school meal participation be part of a wellness policy?**

In a pilot test involving 100,000 students, NDC and the School Nutrition Association helped schools offer milk in a single-serve plastic container, add an extra flavor, insure proper refrigeration and merchandise milk in attractive retail-style coolers. The elementary schools in the study increased milk sales by 15% and the secondary schools saw a 22% increase. (The average across all schools was 18%.)

But that wasn't all. In these schools, **participation in school lunch programs rose by 4.8 percentage points in secondary schools.** In elementary schools, where participation was already at very high levels, participation rose 1.5 percentage points.[12]

That means that what NDC calls the New Look of School Milk – packaging, flavors, merchandising – was bringing more kids into the cafeteria. Those kids weren't just getting more milk. Their overall diets were improving as they got balanced meals rather than buying lunch from vending machines.

Even before wellness policies take effect, hundreds of school districts nationwide are switching to the New Look of School Milk. They're finding it not only helps them meet nutritional goals, but consumption increases make it financially sustainable as well.

Give Kids Plenty of Choices

Remember Henry Ford's famous saying that you can buy a Model T in any color you want, as long as it's black? That's probably not the best approach to take in marketing to kids! Instead, we recommend giving kids a range of milk choices – plenty of flavors, a good variety of fat levels.

- Most kids are already used to drinking a particular variety of milk. By limiting kids' choices to varieties they don't drink at home, the risk is that they may be less likely to drink milk, and more likely to choose a less-healthy beverage. For example, 2% milk is still consumed at about three times the volume of 1%,[13] so many kids in your school are used to drinking it.
- Many groups are interested in promoting low-fat (1%) and fat-free milk. Schools can choose to promote these varieties without prohibiting other fat levels.
- In the same authoritative NHANES study we mentioned before, consumers of 2% milk had lower body weight and BMI than non-milk-drinkers. And there was no difference in either body weight or BMI between drinkers of 2% and 1% or fat-free milk.[14]

Flavors Sell!

More and more schools are adding milk flavors – not just traditional chocolate, but strawberry, banana, vanilla, mocha and others. They're finding that kids love the new flavor experiences and milk sales go up! From a wellness standpoint, flavors are a good decision even though flavored milk has some added sugar.

- A peer-reviewed study found children who consume flavored milk got more calcium than those who didn't … but **no more added sugars, and no more total fat!** The researchers wrote that flavored milk was probably displacing sweetened soft drinks and fruit drinks from these kids' diets.[15]
- In the NDC-SNA pilot test, the 150 schools involved found that an additional flavor contributed to an 18% average increase in milk sales.[16]

In their wellness policies, many schools may **set limits on total sugars or added sugars** in beverages and snacks. Some schools that have already reviewed these issues have decided – wisely, we think – not to subject milk to any sugar limits that would keep flavored milk away from students. These schools do not want to risk students missing out on the calcium, potassium, magnesium and other nutrients in good-tasting flavored milk. In the same way, by keeping sugar limits at a reasonable level, students will continue to enjoy healthy and great-tasting products such as yogurt that is often tolerated better by students who are lactose maldigesters ("lactose intolerant").

Serving Sizes: Keep It Real

We've all become more sensitive to portion sizes in the last few years, as some experts have pointed to super-sized products as one reason for the obesity crisis. In designing their wellness policies, many schools may take a hard look at the portion sizes of products they will offer.

Please use this information to get involved with the development of school wellness policies in your community, whether it's attending school board meetings, writing a letter, or interacting with the school food service team. Contact a local Dairy Council® at ***www.NutritionExplorations.org*** *for more information.*

Healthy Snacks: Remember Dairy!

Milk is the cornerstone of the cafeteria – and we'll get to that in a minute. But milk and other dairy products hold great potential to help construct a portfolio of healthy snacking options that can meet both nutritional and fiscal needs.

- Milk vending will soon be protected by law! Beginning in July 2005, the new child nutrition law says an exclusive beverage sales contract can't be used to limit a school's ability to sell milk anytime, anywhere on school property or at school events.[17]
- Cheese is a nutrient-dense, healthy snack that is popular among kids. More data from the NHANES study: Frequent cheese consumers had better levels of "good" cholesterol (HDL) than people who didn't eat cheese.[18] Other evidence suggests cheeses may protect against dental caries.[19] And of course, the low lactose content of cheese makes it a good way for lactose-intolerant individuals to get calcium, phosphorus, Vitamin D and other nutrients.

Some schools have considered an upper limit on the fat and saturated fat content of all foods. Many of these schools have exempted nuts from these limitations – and the same logic would suggest exempting cheese as well. Like nuts, cheese can be a popular item as schools attempt to stock and offer healthy snacks.

Of course, it's also worth remembering that the Dietary Guidelines for Americans suggest limits on total fat and saturated fat that apply to your entire diet over a period of time – not to individual foods on particular occasions. Schools are likely to find that a dietary limitation – besides being more consistent with the Dietary Guidelines – is much more workable in the real world than a limit on individual foods.

We're Here to Help

NDC would like to help in developing school wellness policies. The dairy council contact information below can be used to tap into a world of information resources and practical help in boosting students' wellness through naturally nutrient-rich dairy products.

1Public Law 108-265, Child Nutrition and Reauthorization Act of 2004, Sec. 204 (42 USC 1751 note).

2 U.S. Department of Agriculture, Agricultural Research Service, USDA Nutrient Data Laboratory, 2004. USDA National Nutrient Database for Standard Reference, Release 17. Cited in National Dairy Council, "Improve Diet Quality with 3-A-Day™ of Dairy."

3 National Dairy Council, "Health Professionals Support 3-A-Day for Stronger Bones." Accessed May 11, 2005, at http://www.3aday.org/yourhealth/support.asp

4 Public Law 108-265, Sec. 102 (42 USC 1754).

5 M. Murphy, J. Douglass, M. Latulippe, S. Barr, R. Johnson, C. Frye, "Beverages as a Source of Energy and Nutrients in Diets of Children and Adolescents." Program No. 275.4, 2005 Experimental Biology Meeting, San Diego, CA.

6 National Dairy Council, "The Children's Health Paradox: Overweight, Yet Undernourished." Accessed May 13, 2005, at http://www.nationaldairycouncil.org/NationalDairyCouncil/Nutrition/Child/FINALinsert.pdf.

7 "The Benefits of Dairy Foods in Health Promotion." Dairy Council Digest, Vol. 75, No. 3, May/June 2004.

8 "Dairy Foods' Contribution to Nutrient Dense Diets." Dairy Council Digest, Vol. 75, No. 1, January/February 2004.

9 U.S. Department of Agriculture, U.S. Department of Health and Human Services, Dietary Guidelines for Americans 2005.

10 National Dairy Council, unpublished data based on National Health and Nutrition Examination Surveys (NHANES, 1988-1994 and NHANES, 1999-2000) and Continuing Survey of Food Intake by Individuals (CSFII, 1994-96, 1998).

11 Burghardt J, Devaney B, eds., "The School Nutrition Dietary Assessment Study," Am JClin Nut. 1995; 61 (suppl): 213s-220s.

12 National Dairy Council, "Fact Sheet: School Milk Pilot Test." Sep. 19, 2002.

13 International Dairy Foods Association, Dairy Facts: 2004 Edition.

14 National Dairy Council, unpublished data based on National Health and Nutrition Examination Surveys (NHANES, 1988-1994 and NHANES, 1999-2000) and Continuing Survey of Food Intake by Individuals (CSFII, 1994-96, 1998).

15 R. Johnson, C. Frary, M.Q. Wang, "The nutritional consequences of flavored-milk consumption by school-aged children and adolescents in the United States." Journal of the American Dietetic Association, Vol. 102, No. 6, June 2002.

16 National Dairy Council, "Fact Sheet: School Milk Pilot Test" Sep. 19, 2002.

17 Public Law 108-265, Sec. 102 (42 USC 1754).

18 National Dairy Council, unpublished data based on National Health and Nutrition Examination Surveys.

19 Bowen, W. H. Scandinavian J. Nutr. 46: 178, 2002; Kashket, S., and D. P. DePaola, Nutr. Rev. 60: 97, 2002. Cited in "The Benefits of Dairy Foods in Health Promotion," Dairy Council Digest, Vol. 75, No. 3, May/June 2004.

Dairy and School Wellness

Federal law requires that all districts participating in the National School Lunch program have local wellness policies in place by July 1, 2006. Make sure your policies provide children with access to the dairy they need for growth and development.

Milk, Yogurt and Cheese Are Among the Most Nutritious Choices at School

Research shows that kids who get recommended amounts of dairy foods have better nutrient intakes overall.[1] Milk, yogurt and cheese are naturally nutrient-packed, together providing nine essential nutrients kids need every day including calcium, protein, potassium, phosphorus, vitamins D, A and B12, riboflavin and niacin.

- Calcium helps build and maintain strong bones and teeth.
- Vitamin D helps promote the absorption of calcium.
- Protein builds and repairs muscle tissue.
- Potassium regulates the body's fluid balance and helps maintain normal blood pressure and muscle activity.

The 2005 Dietary Guidelines and MyPyramid Encourage 3 a day of dairy[2]

Consuming 3 cups per day of fat-free or low-fat milk or equivalent milk products is encouraged for:

- Healthy bones: Diets rich in milk and milk products can reduce the risk of low bone mass throughout the lifecycle.
- Better nutrient intakes: Milk product consumption has been associated with overall diet quality and adequacy of intake of many nutrients.
- Key nutrients for kids: Dairy provides calcium, potassium and magnesium; three of the five nutrients most children don't get enough of.
- Weight: Milk and milk products should not be avoided because of concerns that these foods lead to weight gain.

Flavored Milks: A Naturally Nutrient-Rich Choice

According to the 2005 Dietary Guidelines for Americans, small amounts of sugars added to nutrient-dense foods, such as reduced-fat milk products, may increase a person's intake of such foods by enhancing the palatability of these products, thus improving nutrient intake without contributing excessive calories.[3] Flavored milk's contribution to the added sugar in the diets of kids ages 6-17 is minimal, just 2.2 percent.[4]

Flavored milks are nutrient-rich and provide the exact same nutrients and benefits as unflavored milk. Both contain a high proportion of essential nutrients in relation to their calorie content. Children who consume flavored milk have higher calcium intakes, but similar total fat and added sugar intakes compared with children who do not drink flavored milk.[7]

Kids Drink More Milk When Schools Provide Great Flavors, Plastic Containers

- Kids drink more milk when schools offer it in plastic, re-sealable containers in different sizes, various flavors, merchandising locations (vending or ala carte) and ice-cold refrigeration.[6]
- Kids love the great taste and drink more milk when it's available in flavors like chocolate, vanilla and strawberry.[6]
- Research shows that children who consume flavored milk have greater total milk intake, less soft drink and fruit drink intake, but similar fruit juice intake, compared with children who do not drink flavored milk.[7]
- Milk provides more calcium and protein per penny compared to any other foods served on school lunch menus.[8]

Healthy Dairy Varieties for Vending

With kids spending more than half their day in school, it's important that they get the nutrients they need while they're there. The American Academy of Pediatrics recommends offerings such as real fruit juices, water and low fat white or flavored milk be provided in preference over sweetened drinks in school vending machines.[5] Milk, flavored milk, yogurt, and yogurt drinks taste great and are nutrient-rich alternatives to typical vending machine options. Natural cheeses, like mozzarella string cheese, also provide students with a portable, nutrient-dense choice.

Vending is one way of helping address the concern that most children don't get the recommended three daily dairy servings. Serving sizes of products available in school vending differ throughout the U.S., with variable package and portion size offerings. One serving of dairy is equal to 1 cup of milk, 1 cup of yogurt or 1.5 ounces of natural cheese. An 8-oz bottle of milk provides a single serving of milk, and a 16-ounce bottle, two. Since most kids don't get enough dairy every day, two servings in one package may be the best way for some to get the recommended amount and benefit from its nutrients.

Variety of Choice Helps Kids Meet Dietary Guidelines

Dairy foods contain different levels of fat to meet consumers' unique taste and nutrition needs. The 2005 Dietary Guidelines for Americans recommend a limit of 20-35% of calories from fat each day. Schools should provide children with choices from a variety of nutrient-rich foods, including dairy products, to help ensure they meet these guidelines and get the nutrients they need.

- NHANES data indicates that children and adolescents (ages 4-18) who drink any milk at all – regardless of fat level – have lower serum LDL cholesterol compared with those who consume no milk.[9]
- NHANES data show no differences in LDL cholesterol levels between those children who consume any milk and those who do not consume milk.[10]
- NHANES data indicate that children who drink 2% milk have no differences in serum lipids (total cholesterol, HDL cholesterol, LDL cholesterol, and triglycerides) compared to those who drink 1% or nonfat milk.[9,10]

Choose Dairy Foods First

For those with lactose intolerance, the 2005 Dietary Guidelines suggests the most reliable and easiest way to derive the health benefits associated with milk and milk product consumption is to choose alternatives within the milk food group, such as yogurt or lactose-free milk, or to consume the enzyme lactase (such as Lactaid tablets) prior to the consumption of milk products. Studies show milk is the most reliable source of calcium, superior to calcium-fortified soy and rice beverages and many orange juice brands.[11] Beyond calcium, milk, yogurt and cheese provide essential nutrients kids need every day including protein, potassium, phosphorus, vitamins D, A and B12, riboflavin and niacin.

Nutritious Choices Help Fuel Academic Performance

Educators and health professionals agree that poor diet and eating habits affect academic performance.[12]

Most Kids Don't Get Enough Dairy

Seventy-seven percent of children ages 9-19 do not meet their recommended dairy intake.[13]

For additional information on dairy's role in school wellness, visit www.nutritionexplorations.org or contact your local Dairy Council.

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[1] Albertson AM, et al. Ready-to-eat cereal consumption: Its relationship with BMI and nutrient intake of children aged 4 to 12 years. *Journal of the American Dietetic Association,* 2003; 103:1613-1619.
[2] Dietary Guidelines for Americans, 2005 [6th Edition]. *www.healthierus.gov/dietaryguidelines*.
[3] Dietary Guidelines for Americans, 2005 [6th Edition]. *www.healthierus.gov/dietaryguidelines*.
[4] The NPD Group Nutrient Intake Panel 3 years ending Nov. 2004.
[5] AAP Policy Statement: Soft Drinks in Schools. *Pediatrics,* 2004; 113(1): 152-154.
[6] National Dairy Council and American School Food Service Association. The School Milk Pilot Test. Beverage Marketing Corporation for NDC and ASFSA, 2002. *www.nationaldairycouncil.org.*
[7] Johnson, et al. The nutritional consequences of flavored milk consumption by school-aged children and adolescents in the United States. *Journal of the American Dietetic Association,* 2002; 102(6): 853-856.
[8] Shanklin CW & Wie S. Nutrient contributions per 100 kcal and per penny for the 5 meal components in school lunch: Entree, milk, vegetable/fruit, bread/grain, and miscellaneous. *Journal of the American Dietetic Association*, 2001; 101(11); 1358-1361.
[9] National Dairy Council, unpublished data based on the National Health and Nutrition Survey (NHANES), 1988-1994.
[10] National Dairy Council, unpublished data based on the National Health and Nutrition Survey (NHANES), 1999-2000.
[11] Heaney R, et al. Not All Calcium-fortified Beverages Are Equal. *Nutrition Today*, 2005; 40(1): 39-44.
[12] National Association of State Boards of Education Policy Update, Vol. 5, No. 19.
[13] National Dairy Council, unpublished data based on the National Health and Nutrition Survey (NHANES), 1999-2002.