Lactose Intolerance and Milk Allergy

Facilitator’s Guide

August – September 2014
<table>
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<tr>
<th><strong>Who:</strong></th>
<th><strong>Who is this training designed for?</strong></th>
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<td>All staff who will be working with families requesting soy packages, especially WIC Nutrition Assistants (WNAs).</td>
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<th><strong>What:</strong></th>
<th><strong>What is this training about?</strong></th>
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<td>To help staff, particularly WNAs, understand the differences between lactose intolerance and milk protein allergy and how to work with families requesting soy packages.</td>
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<td>By the end of the session staff will have:</td>
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<td>• compared causes, symptoms, and ways to treat lactose intolerance versus cow’s milk intolerance</td>
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<td>• identified questions to ask to help assess if a child has lactose intolerance or a milk protein allergy</td>
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<td>• compared key nutrients in cow’s milk and many non-dairy milk alternatives</td>
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<td>• practiced, using case scenarios, how to work with families requesting soy packages, including:</td>
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<td>o assessing</td>
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<td>o educating</td>
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<td>o documenting in ISIS</td>
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<td>o and selecting a food package</td>
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<th><strong>Why:</strong></th>
<th><strong>Why is this training required?</strong></th>
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<td>As part of the Final Rule for the Revisions to the Food Package, issued March 4, 2014, USDA has dropped the requirement that families get a medical prescription to request a soy package. USDA has outlined certain guidelines for assessing and educating families who request a soy package for their child. This training will prepare staff to work with these families and comply with USDA’s requirements.</td>
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<p>| <strong>Duration:</strong> | Approximately 1 hour. |</p>
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<th><strong>Materials:</strong></th>
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<td>• Trainee Workbook</td>
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<td>• Choosing the Right Milk Flowchart</td>
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<td>• Pens or Pencils</td>
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<td><strong>Optional:</strong></td>
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<td>• “Lactose or Dairy Intolerance” handout (available on the WIC website)</td>
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<td>• Taste samples of non-dairy milk alternatives. The following are mentioned in the training: soy milk (both WIC authorized and non-WIC authorized), almond milk, rice milk, coconut milk, and oat milk.</td>
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<th><strong>Preparation:</strong></th>
<th>1) Decide which staff, just nutritionists or nutritionists and WNAs, your agency will have assessing requests for soy packages for children.</th>
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<td>2) Review the 5 practice scenarios. Decide if you will have your staff work in pairs or small groups and how many scenarios each staff member will use for practice.</td>
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<td>3) Think about who in your agency will be responsible for crossing out the “Soy Request Box” on pediatric referral forms that will be given to participants starting October 1st.</td>
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<td>4) This module includes some information about several non-dairy milk alternatives in addition to soy milk. If you feel your staff will not get questions about these products, please consider having staff focus only on the milk and soy milk on pages 3 and 4 in the Trainee Workbooks. Similar, the taste test of the various non-dairy milk alternatives is optional.</td>
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Lactose Intolerance and Milk Allergy

Soy packages for children

Say: Starting this fall there will be a few changes to the food package. The biggest one is that the milk F.I.s for all children 2 and over and adults will be for 1% low-fat milk or non-fat (skim) milk ONLY.

Another change is that it will be possible for children to get a soy package without needing a prescription from the doctor’s office. USDA is requiring staff do a complete assessment to make sure that the soy package is appropriate in this case, and that the family is aware of the nutritional differences between cow’s milk products and soy products.

Ask: How many of you know someone who cannot drink cow’s milk? What kinds of problems do these people have?

Invite staff to call out responses or to share in pairs.
**Slide 4**

**Say:** Lactose is the sugar in milk. To digest lactose you need a special enzyme called “lactase”. As babies we have lots of this enzyme so we can handle the lactose in breast milk. However, for many of us, we have less lactase as we get older.

**Slide 5**

**Say:** What happens if we don’t have much lactase? Well we won’t digest the lactose sugar. But some friendly bacteria in our intestines love to eat this sugar. This is good for the bacteria, but not so good for us, because as the bacteria breaks down the lactose it makes certain gases and other chemicals that can cause

- Bloating
- Cramps, or
- Diarrhea

These symptoms occur 30 minutes – 2 hours after having milk or another food containing lactose.

This is called “lactose intolerance”.

**Slide 6**

**Say:** Some people have severe lactose intolerance and eating any dairy product or other foods with lactose causes discomfort.

Other people can consume “cultured dairy foods” such as aged cheese, cottage cheese, yogurt, and buttermilk without problems because a friendly bacterium in these foods has already removed some or most of the lactose.

Also, people with mild lactose intolerance may be able to handle small servings of milk.

**Ask:** How many of you know someone who can’t drink milk but can eat cheese or yogurt or other dairy products with less lactose? Raise your hands.
Say: Also, there are “lactose –free” dairy products, such as lactose free milk and lactose free yogurt. In these the lactose is already digested. They should cause no problems to someone with lactose intolerance.

Ask: Who has ever tried them? What was your experience?

Say: This is the kind of milk in packages CT4L and CP4L.

Say: How common is it for people to have lost some of their ability to digest lactose?

Say: According to the National Institutes of Health approximately 2/3 of all people have a reduced ability to digest lactose after infancy. This doesn’t mean they are all severely lactose intolerant, just that many people, after infancy may have some reduced ability to digest milk sugar.

Lactose intolerance in adulthood is most prevalent in people of East Asian descent, affecting more than 90 percent of adults in some of these communities. Lactose intolerance is also very common in people of West African and Arab descent.

It is rare for babies to be lactose intolerant!
A milk allergy is very different from lactose intolerance. Milk allergy is an abnormal response by the body's immune system to some of the proteins in milk and products containing milk. These proteins may include whey or casein.

Cow's milk is the usual cause of milk allergy, but milk from sheep, goats and buffalo also can cause a reaction.

Allergic reactions to milk may include a rash, hives, or wheezing. A milk allergy usually occurs minutes to hours after consuming milk. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction.

A person who is allergic to dairy products should avoid ALL dairy products, including cheese.

Soy and tofu might be the best food package for a child or adult with a milk allergy. However, some people who are allergic to dairy products are allergic to soy products too.

Avoidance is the primary treatment for milk allergy.

Many children outgrow milk allergies in a few years, but some may continue to experience milk allergies into teen years.
Instructions:
Invite trainees to review the table comparing Lactose Intolerance and Milk Protein Allergy in their workbooks. Ask them what questions they have.

Invite them to discuss in pairs and write in the workbook what questions they might ask to help determine if the child has lactose intolerance or milk protein allergy.

Facilitator’s note: If you would like some ideas of questions staff might ask when screening for lactose intolerance and milk protein allergy, look at the samples included in the facilitator’s guide.

Instructions:
Invite staff to review labels and table of different “milks”.

Ask them to discuss in pairs or groups what important differences they notice.

NOTE: Some important differences:
Protein in most milk alternatives is low;
Calcium levels in many milk alternatives may vary; and for each kind of alternative milk, the fat and calorie levels may vary significantly.

If your staff don’t get questions about the other milk alternatives, such as almond, rice, coconut, or oat “milks” you may instruct your staff to ignore the information about these drinks in the Training Workbook.
Why might WIC families want to decrease or eliminate dairy?

**Say:** Ask what reasons, besides lactose intolerance or milk allergy, do you think a WIC family might have for avoiding dairy products?

Some possible answers:
- Religious beliefs
- Cultural practices
- Veganism – (veganism means avoiding ALL animal products – e.g. some vegans also avoid honey)
- Other symptoms that are NOT related to lactose intolerance or cow’s milk allergy
- Health beliefs – dairy may be unhealthy for their child or people.

**Say:** As you all know, dairy products can be good sources of many key nutrients. These particularly include calcium, vitamin D, and vitamin B-12 (for vegans who don’t get any animal products). This can be of concern when you talk with families whose children who may not be getting any dairy products in their diets. One of the things you’ll want to look for when you conduct your diet assessment is possible alternative sources of these nutrients.

NOTE: Vegan diets also may be low in several other nutrients, such as protein, iron, and zinc.

**Say:** Look at page 6 and the lists called “Non-dairy sources of Calcium”, “Non-dairy sources of Vitamin D”, and “Vegan sources of Vitamin B-12”. At your tables or with a partner discuss:

Page 6
What did you already know?
What is new or surprised you?
Optional: Invite staff to review the handout called “Lactose or Dairy Intolerance” Have them circle, underline, or highlight anything they think they could use when talking w/participants.


Say: Look at the flowchart called “Choosing the Right Milk”. **NOTE: This is a separate page.**

This is a guideline to help you decide if a participant may have milk allergy or lactose intolerance, and what steps to take.

On the top are some reasons we just discussed for avoiding dairy products. They are in different colors.

In purple are some symptoms of cow’s milk allergy, such as rash, hives, vomiting or wheezing.

In brown is a physician’s order.

In blue, preference based on religion, culture or veganism.

In red are other symptoms such as gas, bloating, cramping, and diarrhea.

And in green is “constipation”, which is a symptom that usually has nothing to do with milk allergy or lactose intolerance

On the far left in the grey box are steps.

1st the participant’s family may have a reason for wanting to reduce or eliminate dairy products.

Then you can do more assessment.

Below that are suggestions about education.
Then you need to consider how to document in ISIS.

**NOTE:** Documentation is part of the federal regulations! You MUST document the reason for issuing a soy package to a child!

And finally, you must decide what food package may be appropriate.

### Slide 21

**Say:** Now we will go through each situation or reason for the request, starting on the left with purple boxes starting with “rash, hives, vomiting, wheezing”.

**Instructions:** Encourage staff to follow along in their guideline, rather than relying only on the information on the slide. Go over the steps for helping someone with a possible cow’s milk allergy.

**NOTE:** The chart has “If appropriate” for selecting Soy & Tofu Packages, because sometimes children with cow’s milk allergy can NOT handle soy products either! This is one reason why the RD/DN should be responsible for assessing this child’s needs and selecting the food package.

### Slide 22

**Say:** Let’s look at the next box over – MD order. If the order is due to a milk allergy – guess what? Refer to the nutritionist and let her or him continue the process.

If not, follow the steps below, including assessing the diet, and offering to discuss some of the possible nutrient deficiencies of a diet without dairy.

In ISIS be sure to record the reason for issuing the soy & tofu package. Finally select the appropriate food package.

Facilitator’s note: We encourage agencies to have the RD/DN see any participant with an
MD/PA/NP order. However, in the event that an RD or DN isn’t available in a reasonable amount of time and the issue isn’t severe, the agency can opt to have the WNA see the participant.

**Say:** Now let’s look at the blue boxes starting with “preference, religion, culture, veganism”.

**Instructions:** Explain steps for preference.

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**Slide 23**

**Preference, religion, culture, veganism**

- **Reason for Request:** Preference, religion, culture, veganism
- **Assess:**
- **Offer Education:** Excluding dairy could make it hard to get specific nutrients (such as calcium, Vit D, Vit B-12)
- **Document in INEP:** Soy & Tofu package issued due to
- **Select Food Package:** Soy & Tofu CT5L, CP4L

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**Slide 24**

**Gas, bloating, cramping, diarrhea**

- **Reason for Request:** Gas, bloating, cramping, diarrhea
- **Assess:**
- **Offer Education:** Excluding dairy could make it hard to get specific nutrients (such as calcium, Vit D, Vit B-12)
- **Document in INEP:** Soy & Tofu package issued due to
- **Select Food Package:** Soy & Tofu CT5L, CP4L

**Say:** Now let’s look at the red boxes starting with “gas bloating, cramping, diarrhea”. These are common symptoms of lactose intolerance.

Complete a diet assessment and see how severe the lactose intolerance is. Then you need to make a decision!

IF the child can NOT handle ANY dairy, then follow the same steps as for someone with a preference or MDs order – offer to discuss possible limitations of a dairy free diet, note the reason for the Soy & Tofu package in ISIS, and issue the proper package.

IF the child can handle some dairy, you can discuss a low lactose diet. Then you can enter code C111 and issue a low lactose package (which contains lactose free milk).
Say: Finally, in green, you may have a situation where the symptoms probably are not related to cow’s milk allergy or lactose intolerance.

In this example, the family is concerned about the child seeming constipated and says they think he’s allergic to milk. You can assess the diet for typical causes of constipation. For education focus on the likely causes of constipation for this child based on your assessment.

You can end your session writing the appropriate notes in ISIS and issuing a standard food package (assuming there is not a milk allergy).

Ask: What questions do you have about this flow chart? In a moment you will have a chance to practice using it.

Say: You’ll get to practice with case scenarios. Let’s turn to the 1st one in your workbook and try it together.

Instruction:
Invite someone to read the 1st scenario. Go through each question on the handout and ask the group how they might answer this question.

Invite trainees to work on scenarios 2-5 on their own, working in pairs. After, review their ideas.

Facilitator’s note: If you would like some guidelines on ways to answer the questions in the scenarios, look at the samples included in the facilitator’s guide.
Say: One more thing you need to know. On our current pediatric referral form we have a box where the doctor's office can document the request for soy products.

Say: Starting Oct 1st we won't need doctors to fill it out any more! Soon the State will have a new version of this form, without this information. This may not be ready for Oct 1st. If not, we will need to give participants pediatric referral forms with the soy request box crossed off until we get the new forms.

Ask: What other questions do you have?
Optional

**Instruction:** Allow staff to try various types of cow milk and alternatives. Invite them to share their observations.

These may include:
- 2% fat cow milk
- 1% fat cow milk
- Non fat cow milk
- 1% lactose free milk
- WIC authorized soy milk
- Other brands of soy milks
- Almond milk
- Oat milk
- Coconut milk
- Hemp milk
Lactose Intolerance vs. Milk Protein Allergy.

What questions could you ask to help determine if a child has lactose intolerance or milk protein allergy? Possible suggestions

What are the symptoms?

When did the symptoms start?

When do the symptoms happen? (Always happen when consuming dairy? Which kinds of dairy? With any other foods?)

What recent changes, if any, have taken place in the child’s diet?

Who else, if anyone, in the family has the same problem?

Nutrient Composition: Cow’s Milk & Milk Alternatives.

What important differences do you notice?

Protein and Vitamin D content of milk alternatives can vary greatly.
Page 7 - Scenario 1: At an enrollment appointment, 3 1/2 year old Mei’s parents request soy for her. They say that Mei has been really gassy and has had diarrhea for the past month. Mei drinks about 16 oz. of milk throughout the day.

- What other information would you need & what questions will you ask Mei’s parents?

  What has your doctor told you about the symptoms your child has? Anyone else in the family have this problem? Have you made any changes to her diet recently? Can she tolerate any other forms of dairy?

- What information could you offer Mei’s parents?

  Importance of milk for health. Information on milk/lactose intolerance being more common as children get older. Milk vs other milk products and lactose content (lower in yogurt & hard cheeses, lactose-free milk)

- What food package(s) could you offer this PPT?

  Lactose-free/low-lactose package or soy, depending on parents’ preferences

- What C-codes might you enter for this PPT?

  C111- lactose intolerance

- What might you write in the INEP notes?

  NOTES: Child has gas, diarrhea - possible lactose-intolerance. Discuss importance of milk products and reviewed lactose content in milk foods.

  GOAL: Offer lactose-free milk, monitor child for continued symptoms.

  FOLLOW-UP: Parents to follow-up with doctor if symptoms continue. Contact us to discuss possible change in food package if needed. Will follow up at next re-certification appointment on status.
Page 8 - Scenario 2: At the 2 year old recertification appointment, Jorge’s parents say he has constipation because of the milk. After going through the Nutrition Questionnaire and asking additional questions about Jorge’s diet, we see that Jorge drinks 5 8-oz. servings of milk most days along with yogurt and cheese.

- What other information would you need & what questions will you ask Jorge’s parents?

  Has he had this before? How long has he been constipated? How often does he go to the bathroom/why do you think he’s constipated? What does the doctor say? Has anything in his diet changed? What other beverages is he drinking? How much fluid? How active is he?

- What information could you offer Jorge’s parents?

  Age appropriate portions and tie into excessive milk intake. Review tips from constipation handout (fiber, fluids, physical activity). Refer to doctor if continued problems.

- What food package(s) could you offer this PPT?

  No change.

- What C-codes might you enter for this PPT?

  No C-codes needed.

- What might you write in the INEP notes?

  NOTES: Child is constipated. Shows excessive milk intake per Nutrition Questionnaire. Not eating enough high fiber foods. Disc appropriate milk amounts. Used constipation handout and reviewed fiber foods, water, and physical activity recommendations.

  GOAL: Reduce milk intake to 16oz/day. Increase physical activity to 1 hour/day and increase liquids.

  FOLLOW-UP: Parents to follow-up with doctor if symptoms continue. Will follow up with constipation, milk intake, & physical activity at single mid-certification appointment.
**Page 9 - Scenario 3:** Thirteen month old Peter’s parents want to switch his food instruments from cow’s milk to soy milk. They say Peter is allergic to cow’s milk.

- What other information would you need & what questions will you ask Peter’s parents?

*Why do you think Peter is allergic to milk? What does the doctor say about Peter being allergic to milk? What symptoms are you noticing? Was he formula fed? If so which kind? Does milk allergy run in the family? Is Peter allergic to any other foods (soy, or others)?*

- What information could you offer Peter’s parents?

*Refer the family to the Nutritionist/RD, setting an appointment at a time s/he is available, if necessary. She/he will work w/the doctor as needed.*

- What food package(s) could you offer this PPT?

*Refer the family to the nutritionist.*

- What C-codes might you enter for this PPT?

*C89*

- What might you write in the INEP notes?

*Put comments as necessary, including noting referral to the nutritionist. Nutritionist/RD to add INEP notes or comments as appropriate.*
Page 10 – Scenario 4: 3 year old Sanjita’s parents have recently moved to California from India. They explain that because of their religion they do not eat any animal products.

- What other information would you need & what questions will you ask Sanjita’s parents?

*Diet assessment to look for vegan sources of calcium, Vitamin D, B-12 or other nutrients that vegan diets might be low in.*

- What information could you offer Sanjita’s parents?

*Explain what the soy package contains. If parents would like, you can offer info about vegan sources of calcium, Vitamin D, or B-12 and other nutrients that vegan diets might be low in.*

- What food package(s) could you offer this PPT?

*Soy and Tofu package.*

- What C-codes might you enter for this PPT?

*N/A*

- What might you write in the INEP notes?

*NOTES: Family does not eat any animal products due to religious beliefs. Discussed vegan sources of calcium, Vitamin D, and Vitamin B-12.*

*GOAL: Monitor growth.*

*FOLLOW-UP: Follow up with diet at next appointment.*
Page 11 - Scenario 5: Hazel is brought to her 1 year re-cert. She had been fully breastfed, and is still being breastfed. Her parents don’t want to offer cow’s milk because they don’t believe it’s the healthiest option. They want to give her almond milk instead.

- What other information would you need & what questions will you ask Hazel’s parents?

What are your concerns with cow’s milk? What have you heard about cow’s milk versus almond or other types of milk?

- What information could you offer Hazel’s parents?

Offer information about Calcium. Offer information about soy vs. cow’s milk package. Offer information about lactose intolerance (if needed).

- What food package(s) could you offer this PPT?

Inform the participant that almond milk may not be purchased with the WIC FIs (it is not a federally-authorized milk substitute). Offer regular, low-lactose, or soy package based on parent’s concerns/desires.

- What C-codes might you enter for this PPT?

May not be needed. Low-lactose if needed.

- What might you write in the INEP notes?

NOTES: Fully breastfed child, parents do not want to offer cow’s milk because they do not believe in offering it. Discussed reason for preference, reviewed nutrient differences. Decided to offer soy milk & tofu.

GOAL: Offer calcium fortified soy milk, tofu, & other calcium foods 4svgs/day.

FOLLOW-UP: Ask about soy milk & calcium food intake at single mid-certification appointment.