Building Healthy Bones—Physical Activity and Calcium
This month’s topic is about having healthy bones and how calcium and physical activity help us to achieve that goal.

Calcium is a mineral that the body needs for numerous functions, including building and maintaining bones and teeth, blood clotting, the transmission of nerve impulses, and the regulation of the heart’s rhythm. Ninety-nine percent of the calcium in the human body is stored in the bones and teeth. The remaining one percent is found in the blood and other tissues. The body gets the calcium it needs by eating foods that contain calcium. Good sources include dairy products and dark leafy greens or dried beans.

Osteoporosis, or "porous bones," is the weakening of bones caused by an imbalance between bone building and bone destruction. People typically lose bone as they age, despite consuming the recommended amount of calcium necessary to maintain optimal bone health. An estimated 10 million Americans - 8 million women and 2 million men - have osteoporosis. Preventing osteoporosis depends on two things: making the strongest, densest bones possible during the first 30 years of life and limiting the amount of bone loss in adulthood.

Physical activity that puts some strain or stress on bones causes the bones to retain and possibly even gain density throughout life. Cells within the bone sense this stress and respond by making the bone stronger and denser. Such "weight-bearing" exercises include walking, dancing, jogging, weightlifting, stair-climbing, racquet sports, and hiking. In addition, physical activity doesn’t strengthen all bones, just those that are stressed, so you need a variety of exercises or activities to keep all your bones healthy. Another function of physical activity, probably at least as important as its direct effect on bone mass, is its role in increasing muscle strength and coordination. With greater muscle strength, one can often avoid falls and situations that cause fractures. Making physical activity a habit can help maintain balance and avoid falls.


Club Roll Call: What dairy foods have you eaten today?

Physical Activity Calendars
Collect the October Physical Activity Calendar from each participant. Record each individual’s total number of activity minutes on the Get Up and Move! Club Chart.

Have a short discussion to review the Physical Activity Pyramid and reflect on their activity for the past month. Have each individual look closely at his or her calendar to see how the activity matches the advice from the Physical Activity Pyramid.

Reflection Questions:
Did you see an increase of physical activity over the days in October? What types of physical activities have you been doing? Are you getting at least 60 minutes of physical activity every day?
Pass out the **November Physical Activity Calendar**.

**Educational Activity**
This month members will participate in numerous “weight-bearing” activities, which help to strengthen bones. Weight-bearing activities include running, walking, skipping, jumping rope, jumping jacks, push-ups, hopping, and hopscotch. In order to allow members to experience a few different types of weight-bearing activities, the activity this month will be a **weight-bearing relay**.

**Recipes/Snacks**
The November snack is **vegetable cheese soup**, and is perfect for cooler weather! One serving of this snack provides youth with 15% of their recommended daily value of calcium.

**Family Activity**
The November family activities are meant to encourage the consumption of calcium-rich dairy products and participation in weight bearing activities. Families can complete the **3-A-Day of Dairy chart** and are challenged to do fifteen minutes of weight-bearing activity. Another activity families can do together is the “**Digging for Calcium**” Scavenger Hunt to learn what the best dietary sources of calcium are.

**Community Activity**
This month’s community activity encourages members to interview their friends and classmates in order to learn about their broken bone history. Members can then visit the school or local library or use the internet to find out more about those bones!

**Ties to 4-H Projects**
In **Dairy Cattle** projects, members can learn about calcium-rich dairy products and dairy animals. Those enrolled in **Dairy Goats** will explore another source of dairy products – goats’ milk! **Dairy Foods** projects will teach members to plan, prepare, and serve food dishes that include high-calcium foods such as cheese, milk, ice cream, and yogurt. Members will also investigate the role of dairy in a nutritious diet. In **Outdoor Meals**, cooking nutritious meals outdoors is explored, as well as participating in hiking and walking, two great weight-bearing activities!

All **Get Up & Move!** materials can be found on the State 4-H website at [http://www.4-h.uiuc.edu/opps/move](http://www.4-h.uiuc.edu/opps/move).

---

Get Up & Move!
<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Weekly Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each day fill in what physical activity you did and how many minutes you did it.

Name ____________________________

total minutes of physical activity

Bones of the Body
Find the names of bones in the body that need calcium to stay healthy!

- FEMUR
- FIBULA
- HUMERUS
- RADIUS
- RIBS
- SCAPULA
- SKULL
- STERNUM
- TIBIA
- ULNA

For more resources visit: www.4-h.uiuc.edu/opps/move

University of Illinois • U.S. Department of Agriculture • Local Extension Councils Cooperating
University of Illinois Extension provides equal opportunities in programs and employment.
Get Up & Move!

Vegetable Cheese Soup

2 cups water
3 cups chopped mixed vegetables, fresh or frozen
1/4 cup chopped onion
1 teaspoon salt
1/2 teaspoon curry powder (optional)
1 cup skim milk
1 1/2 tablespoons cornstarch
1/2 cup lowfat cheddar or American cheese- cut into small pieces

1. Bring 2 cups water to a boil. Add vegetables, onions, salt and curry powder. Cook, covered, until almost tender.
2. Mix milk and cornstarch together. Add to partially cooked vegetables.
3. Cook over medium heat, stirring often, until thickened.
4. Add cheese and stir until melted. Add more water if too thick.
5. Store leftovers covered in the refrigerator.

Yield: 4 servings

Nutrition Facts

<table>
<thead>
<tr>
<th>Serving Size (402g)</th>
<th>Servings Per Container</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories 180</td>
<td>Calories from Fat 15</td>
<td></td>
</tr>
<tr>
<td>% Daily Value*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fat 2g</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Saturated Fat 1g</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Trans Fat 0g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol 5mg</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Sodium 790mg</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrate 34g</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber 7g</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Sugars 11g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein 11g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vitamin A 270% • Vitamin C 30%
Calcium 15% • Iron 10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

<table>
<thead>
<tr>
<th>Calories</th>
<th>2,000</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat Less Than 65g</td>
<td>80g</td>
<td></td>
</tr>
<tr>
<td>Saturated Fat Less Than 22g</td>
<td>25g</td>
<td></td>
</tr>
<tr>
<td>Cholesterol Less Than 300mg</td>
<td>300 mg</td>
<td></td>
</tr>
<tr>
<td>Sodium Less Than 2,400mg</td>
<td>2,400 mg</td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrate 300g</td>
<td>375g</td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber 25g</td>
<td>30g</td>
<td></td>
</tr>
<tr>
<td>Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Get Up & Move!

Physical Activity Series 3: November

Weight-bearing Relay (30 minutes)

Items needed for this activity:
• stopwatch or timer

Activity set up:
• You will need lots of space for this activity
• Designate a relay area. Mark a starting line on one side and on the other side, mark the turning point with an “x.”

Step 1: Information to share with club members (5 minutes) (Source: www.nih.gov)

Does anyone here have any grandmothers or grandfathers who have recently broken a bone or who have gotten shorter as they’ve grown older? Did you know that those family members may have a condition called “osteoporosis,” which means that their bones don’t have enough calcium and other minerals. Without these nutrients, bones can break very easily.

A number of things are important for building your bones and teeth when you’re young and for keeping them strong all through life. We’re going to talk about two of these things, can you guess what they are? I’ll give you some hints: We do one at every meeting. The other begins with the letter C. Can anyone guess? (Take guesses). That’s right! The first is physical activity and the other is calcium!

In order to keep our bones strong, we need to do what is called weight-bearing physical activity, which is when your body works against gravity. That happens when your feet, legs, or arms are carrying most of your weight. Bones are living tissues in our bodies, and when we do weight-bearing activities, it causes new bone tissue to form, making them stronger! Bones also become stronger when muscles push and tug against them during physical activity. What do you think some examples of weight-bearing activities are? (Guide them to the following responses: running, walking, hopping, jumping, skipping, basketball, soccer, baseball, jump rope, hopscotch, jumping jacks, push-ups, dancing climbing stairs, handstands, cartwheels, lifting weights). Those were some great ideas!

Another way to keep bones strong is by getting enough calcium. Calcium is a mineral that builds strong healthy bones and teeth and keeps them strong all throughout life. Where do we get calcium? (Guide them to food and drinks, especially milk and milk products). That’s right. Milk products – milk, yogurt, and cheese – are the best dietary sources of calcium. However milk products aren’t the only sources of calcium! Some people have trouble digesting milk products and others choose not to consume them. So some companies add calcium to foods. These are called calcium-fortified foods and others choose not to consume them. So some companies add calcium to foods. For example, orange juice can be fortified to contain calcium. Another way to get calcium is by eating non-dairy foods that have smaller amounts of calcium than milk products. For example, dark-green leafy vegetables such as broccoli and spinach, cooked dried beans like soybeans, and almonds all contain calcium. Now, how much calcium do we need? Well, a good rule to remember is the American Dairy Association’s “3-a-day” rule of dairy. You need to eat three servings a day of low-fat milk, yogurt, or cheese to make sure you
are getting all the calcium your body needs! That’s easy enough, right?!

**Step 2: Group Activity 1 (15 minutes)**

So now that we know what makes our bones healthy and strong, let’s put it into action! In a little bit, we are going to be doing a relay where each person is going to do a different weight bearing activity. But first, we all need to practice each one!

Everybody is going to learn and practice the five different activities we will be doing in the relay. The first one is skipping! Does everyone know how to skip?? (Pick a youth to demonstrate how to skip). The next one is jumping jacks! Here is how you do a jumping jack. (Pick another youth to show jumping jacks). The third one is galloping. Can someone show us how to gallop? (Pick another youth to show galloping). Then, we have hopping on one foot. (Pick a youth to demonstrate). And finally, jumping with two feet. (Pick a youth to demonstrate). Very good! Those were excellent demonstrations!

(Have all youth form a row on one side of the room. Make sure the area is clear, as they will be moving to the other side of the room). Now, we are all going to do these activities together for two minutes each! When I say “Go!” you will do the activity I say back and forth across the room in a straight line! This isn’t a race! It’s just to get you moving and practicing the different weight-bearing exercises! Be careful not to run into each other!

Ready? The first one we will do is skipping! Go! (Youth will skip back and forth. After two minutes of skipping, stop them!) Great job! You are all great skippers! The next exercise is jumping jacks! Normally we do jumping jacks in place, but for this activity you have to move forward while doing them! Ready, Go! (Youth will do jumping jacks back and forth. Again, stop them after two minutes). Very good! Are you getting tired yet?! The third one is galloping! Ready, Go! (Stop youth after two minutes). We’re almost there! Next we are going to hop on one foot! If you need your other foot for balance once in awhile, that’s okay! Just make sure you are hopping on one foot while you’re going forward! Ready, Go! (Stop members after two minutes). Okay, last one! Now we are going to jump with two feet! No running starts! Ready, Go! (Members will jump with two feet back and forth. Stop them after two minutes.)

Great job everyone! We just did ten minutes of weight-bearing exercise!

**Step 3: Group Activity 2 (10 minutes)**

Now I want everyone to get into groups of five people! (If you have extra youth, you can make them a group and have some members of that group go more than once. Or you can add them to other relay teams and add an extra weight-bearing activity such as walking or running).

Now that you are in your teams, I have a job for you. For this relay, we want each person on your team to do a different activity. So I want your team to discuss and decide who is going to do what! You will need a skipper, a jumping jack-er, a galloper, a one-foot hopper, and a two-foot jumper! I will give you all one minute to decide! (After one minute, ask each group if they have one person for each activity.) Okay, let’s line up for the relay in this order: skipper, jumping jack-er, galloper, hopper, and jumper. (If you have a small group of 3 or 4, where some members might go more than once, you may have to help them choose activities and line up. Also, if you have a group of 6 where someone will be walking or running, have the first person in the other groups go twice, skipping the first time and walking or running the second time).

Okay, I think we’re ready! On your marks, get set, GO!

(After relay) Great job everyone! We got a lot of physical activity done today! And had a lot of fun doing it! Let’s see which of those five activities you all liked the best. (Take a poll to see which activity was the favorite).

Get Up & Move!
A Recipe for Healthy Bones
In order for children to have healthy bones, they need enough calcium in their diets and sufficient time spent in regular physical activity. As a parent, you can help ensure your child is getting enough of each of these ingredients to develop and maintain healthy bones!

Calcium is a mineral that the body needs for numerous functions, including building and maintaining bones and teeth, blood clotting, the transmission of nerve impulses, and the regulation of the heart's rhythm. Ninety-nine percent of the calcium in the human body is stored in the bones and teeth. One important way the body gets the calcium it needs is by eating foods that contain calcium. Good sources include dairy products and dark leafy greens or dried beans.

Physical activity that puts some strain or stress on bones causes the bones to retain and possibly even gain density throughout life. Cells within the bone sense this stress and respond by making the bone stronger and denser. Such "weight-bearing" exercises include walking, dancing, jogging, weightlifting, stair-climbing, racquet sports, and hiking. In addition, physical activity doesn't strengthen all bones, just those that are stressed, so you need a variety of exercises or activities to keep all your bones healthy. Another function of physical activity, probably at least as important as its direct effect on bone mass, is its role in increasing muscle strength and coordination. With greater muscle strength, one can often avoid falls and situations that cause fractures. Making physical activity a habit can help maintain balance and avoid falls.


Tips for getting more calcium in your child’s diet  (Source: www.kidshealth.org)

Add cheese to meals and snacks:
- Put some cheddar in an omelet.
- Add a slice of American, Swiss, or provolone to sandwiches.
- Serve whole-grain crackers with low-fat cheese as an afternoon treat.
- Make grilled cheese sandwiches or slices of cheese appealing by using cookie cutters to create hearts, stars, and favorite animal shapes.
- Top vegetables (especially those that usually prompt an "Ick!" or an "Ew!") with melted low-fat cheese.
Put some pizzazz in regular milk by adding a touch of strawberry or chocolate syrup (which doesn't tack on a significant amount of sugar or calories). Steer clear of store-bought flavored milk drinks, though, which can be packed with unnecessary sugar. For breakfast, add fresh fruit or unsweetened apple butter to cottage cheese.

For dessert or an afternoon snack:
- Serve low-fat or fat-free frozen yogurt topped with fruit.
- Create parfaits with layers of plain yogurt, fruit, and whole-grain cereal.
- Give your child a glass of ice-cold milk to dunk or wash down a couple of favorite whole-grain cookies or graham crackers.

Offer your child plenty of nondairy foods that still pack a calcium punch:
- Add white beans to your child's favorite soups.
- Top salads or cereals with slivered almonds and chickpeas.
- Serve chili with red beans and cheese.
- Pour a tall glass of calcium-fortified juice for breakfast.
- On grocery-shopping excursions, look for calcium-fortified foods, including breads and cereals.
- Serve more dark green leafy vegetables (such as broccoli, kale, collard greens, or Chinese cabbage) with meals.
For this month’s family activity, we challenge your family to build strong, healthy bones! As you learned at this month’s meeting, foods like milk, cheese, and yogurt are high in calcium, which is essential to bone building.

This month, there are two activities you can do with your family. The first is to keep track of everyone’s consumption of dairy products! You can use the chart found on the American Dairy Association’s website at www.3aday.org, or you can make your own! Just write down the names of everyone in your family on the side of a piece of paper and the days of the week across the top. Every day, for each person, you can make three boxes labeled milk, cheese, and yogurt. Each evening, your family can get together to count up how many of each type of dairy food you ate! You goal should be to eat three of these dairy products per day!

When everyone is done filling in the chart for the evening, do fifteen minutes of weight-bearing activity to strengthen your bones and muscles! You can do one activity for the entire fifteen minutes or you can try more than one activity! Some things you can do include: walking, running, skipping, hopping, jumping rope, jumping jacks, push-ups, and climbing stairs!

Another activity your family can do together the next time you visit the grocery store is the “Digging for Calcium” scavenger hunt (Source: www.nih.gov). You will learn what foods are the best sources of calcium by exploring the Nutrition Facts Label on each item! You can find the “Digging for Calcium” activity on the State 4-H website at http://www.4-h.uiuc.edu/opps/move/.
Extra Take-Home Activity
Scavenger Hunt Guide: Digging for Calcium

Note: The next time you’re at a grocery store with a parent or family member, take this scavenger hunt guide along with you to search for foods and drinks that are sources of calcium.

Step 1
FIND SOURCES OF CALCIUM IN MILK PRODUCTS

Read this paragraph out loud:

Many milk products are good sources of calcium. On the Nutrition Facts label, calcium is listed as a percentage of the daily value (% DV). To figure out how many milligrams of calcium a food has, add a 0 (zero) to the end of the % DV listed on the label. For example, a food with 20% DV of calcium has 200 milligrams of calcium in it. Don’t forget the “5–20” rule when looking at the Nutrition Facts label. 5% DV or less means the product is low in calcium, and 20% DV or more means the product is high in calcium.

Young people ages 9 through 18 should get 1,300 milligrams of calcium a day, so they should choose foods that add up to 130% DV of calcium. It is best to eat calcium-rich foods that are low in fat.

Read the Nutrition Facts label and ingredient list, and fill in the chart.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Whole milk</th>
<th>Fat-free milk</th>
<th>Cheddar cheese</th>
<th>String cheese</th>
<th>Plain fat-free yogurt</th>
<th>Yogurt with fruit flavor</th>
<th>Cottage cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the % DV of calcium per serving?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How many milligrams of calcium does this food have? (HINT: just add a zero to the % DV.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nutrition Information

What is a gram?

- The Nutrition Facts label uses two metric units to measure weight—grams (g) and milligrams (mg).
- These measurements tell you exactly how much of each nutrient is in a serving.
- Grams and milligrams are very small: 1 gram is about the weight of a paper clip and 1,000 mg = 1 g.
3. Of the milk products listed above, which are considered “high” in calcium (contain 20% DV or more)?

1. ____________________ 2. ____________________ 3. ____________________

**STEP 2: FIND SOURCES OF CALCIUM IN NON-DAIRY FOODS**

Read this paragraph out loud:

Not everyone likes milk, yogurt, or cheese. Some people have trouble digesting these foods, and others may choose not to eat or drink them. Young people who do not or cannot have milk or milk products still need plenty of calcium. To help people get enough calcium, food companies are adding calcium to certain foods that don’t contain it naturally.

**A: Go to the SOY DRINKS SECTION.** You might find soy drinks located in the dairy or breakfast cereal aisle. If you can’t find soy drinks, ask someone who works in the store to tell you where they are (if the store does not have a soy drinks section, skip to question #5).

4. Do all of the soy drinks have added calcium?  Yes    No

What clues on the package tell you that calcium may be added?

________________________________________________________________________________________

**B: Go to the BREAD SECTION**

5. Write the names of two brands of bread that have added calcium.

1. ____________________ 2. ____________________

What clues on the package tell you that calcium may be added to bread?

____________________________________________________________________________________________

**C: Go to the JUICE SECTION (frozen or fresh)**

6. Write the names of two brands of orange juice that have added calcium.

1. ____________________ 2. ____________________

What clues on the package tell you that calcium may be added to orange juice?

____________________________________________________________________________________________
STEP 3: DON'T FORGET ABOUT OTHER NON-DAIRY FOODS THAT CONTAIN SMALL AMOUNTS OF CALCIUM!

See if you can find any of these foods in the grocery store. Check the Nutrition Facts labels to see how much calcium they contain:

• Canned sardines or salmon with bone
• Collard greens
• Spinach
• Blackstrap molasses
• Bok choy (Chinese cabbage, also called pak choi)
• Canned white beans

Congratulations! You have finished the Digging for Calcium Scavenger Hunt!
Get Up & Move!

Community Activity  Series 3: November

This month’s community activity lets you explore a very important part of your community – your friends and classmates!

Interview ten friends or classmates that have broken any bone in their body – an arm, a leg, a nose – anything! Find out what bone was broken, how old they were when it happened, and how it happened. Be sure to write down all your data!!

After your interviews, answer the following questions.

1. What was the average age when the bones were broken? (Hint: Add up all “age-at-break” values and divide by the number of people you interviewed.) ___________________________

2. What was the most common activity that caused a broken bone? Was it sports, falling, accidents, or something else? __________________________________________

3. What type of bone was broken most often by the people you interviewed? For example, did most people break an arm, a leg, a wrist, or something else? ___________________________
   _______________________________________________________________________

Now, find out more about these bones! Go to your school or local library or use the internet to learn more about the bones of the body. Pick one bone to research more in-depth. Answer the following questions about that bone.

1. What bone did you pick? What is the medical term for that bone? ____________________
   _______________________________________________________________________

2. How long is this bone in an average-sized adult? _________________________________

3. What other bones is this bone attached to? ______________________________________
   _______________________________________________________________________

4. What muscles move this bone? ________________________________________________
   _______________________________________________________________________

Think about a time you or someone you know has broken a bone. At the next meeting, be prepared to tell this story to the other members. You can even make a poster that tells all about that bone and what a person can do to make it healthy!
<table>
<thead>
<tr>
<th>Name</th>
<th>Had a broken bone?</th>
<th>What was broken?</th>
<th>How old when it was broken?</th>
<th>How did the broken bone occur?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>