

# Public Health Club Bake Sale

Welcome to “Infectious Baking” (It’s infectiously fun!). Here are some ideas our members have had in the past. Feel free to use them, or tweak them in any way you’d like. We love creativity, and so will passersby. Thank you volunteering your time, your knowledge, and your talent! Have fun!

\*\*\*\***PLEASE NOTE:** all baked goods should be wrapped in individual “packaging.” Usually 2-3 cookies/brownies/bars per ziplog bag. Please be as “sterile” as possible when handling your items. Also, please staple a **small fact sheet** about your infectious agent to the baggie. Thanks!

## Cow Pie E. coli cookies

(i.e. No-bake cookies with sprinkles)

- 1 ½ c sugar
- ½ c milk
- ½ c butter (1 stick)
- 4 tbsp cocoa powder
- ½ c peanut butter
- 1 tsp vanilla
- 3 c quick-cook oats

In a medium saucepan, combine sugar, milk, butter, and cocoa. Bring to a boil, and cook for 1 1/2 minutes. Remove from heat, and stir in peanut butter and vanilla, then the oats. Drop spoonfuls onto wax paper. Let cool until hardened. Sprinkle with sprinkles while cooling.



## Yellow Fever Lemon Bars

- 1 ½ c flour
- 2/3 c powdered sugar
- ¾ c butter
- 3 eggs (lightly beaten)
- 1 ½ c sugar
- 3 tbsp flour
- ½ c lemon juice
- 1 tsp grated lemon zest (optional)
- Sifted powder sugar (garnish)

**PREHEAT** oven to 350°F. Combine 1 ½ c flour, powdered sugar, & butter. Pat into greased 9 x 13 baking dish. Bake for 20 minutes. Meanwhile, in a bowl, mix eggs, sugar, 3 tbsp flour, and lemon juice til frothy. Pour over hot crust. Bake 20-25 minutes until light golden brown. Let cool. Dust with powdered sugar before serving.



## Rapid Raspberry Cheesecake

- 8 oz cream cheese (1 package)
- 1 can sweetened condensed milk (14oz)
- 1 egg
- 3 tbsp lemon juice
- ½ tsp vanilla
- 1 cup fresh/frozen raspberries (mashed up) 😊
- 1 pre-made chocolate pie crust
- ¼ c whipping cream
- 2 oz semi-sweet chocolate chips

**PREHEAT** oven to 350°F. Beat cream cheese in mixing bowl until fluffy. Gradually beat in sweetened condensed milk. Add egg, lemon juice, and vanilla until just combined. Arrange the raspberries on the crust. Slowly pour cheese mixture over the berries to fill up the crust. Bake about 30 min. or until center is almost set. Cool for about 1 hours.

In small saucepan (or microwave!!) combine cream and chocolate. Cook over low heat, stirring constantly, until chocolate melts and mixture thickens. Remove from heat, pour over cheesecake once the cheesecake is cool. Cool for another 30 minutes. (arrange raspberries on top for garnish!)

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## Rapid Bat Cookies

(sugar cookies that look like bats; you'll need bat shaped cookie cutter!!)

- 2 ¾ c flour
- 1 tsp baking soda
- ½ tsp baking powder
- 1 c butter, softened
- 1 ½ c sugar
- 1 egg
- 1 tsp vanilla

**PREHEAT** oven to 375°F. In a small bowl, stir together flour, baking soda, and baking powder. Set aside. In a large bowl, cream together the butter and sugar until smooth. Beat in egg and vanilla. Gradually blend in the dry ingredients. Break up the dough into 2 large balls. Wrap in plastic wrap and cool for 1 hour. Roll out dough and cut out bat shapes with bat cookie cutter. Bake 8 to 10 minutes in the preheated oven, or until golden. Let stand on cookie sheet two minutes before removing to cool on wire racks. (Decorate with black frosting and give them googly eyes and angry mouths with white frosting)

Please Note! If you bring this item to sell, please keep it in a cooler with ice! This one is probably not a good item to sell at Open House because they have strict regulations on selling food, but it would be great to sell at World Rabies Day!



## Rabies Cookies

(sugar cookies shaped like rabies virions)

- 2  $\frac{3}{4}$  c flour
- 1 tsp baking soda
- $\frac{1}{2}$  tsp baking powder
- 1 c butter, softened
- 1  $\frac{1}{2}$  c sugar
- 1 egg
- 1 tsp vanilla
- Red food coloring (liquid or paste)

**PREHEAT** oven to 375°F. In a small bowl, stir together flour, baking soda, and baking powder. Set aside. In a large bowl, cream together the butter and sugar until smooth. Beat in egg and vanilla. Gradually blend in the dry ingredients. Add food coloring until you get a nice red color (see photo). Form the dough into “bullet” shaped pieces on cookie sheet and sprinkle with red granulated sprinkles. Bake 8 to 10 minutes in the preheated oven, or until golden. Let stand on cookie sheet two minutes before removing to cool on wire racks.

## MRSA (Methicillin Resistant *Staphylococcus aureus*)

(Sugar cookies with *S. aureus* “bunches”)

- 2  $\frac{3}{4}$  c flour
- 1 tsp baking soda
- $\frac{1}{2}$  tsp baking powder
- 1 c butter, softened
- 1  $\frac{1}{2}$  c sugar
- 1 egg
- 1 tsp vanilla
- M&M’s

**PREHEAT** oven to 375°F. In a small bowl, stir together flour, baking soda, and baking powder. Set aside. In a large bowl, cream together the butter and sugar until smooth. Beat in egg and vanilla. Gradually blend in the dry ingredients. Roll out dough and cut out circles of dough. Place on baking sheet. Arrange M&M’s into small bunches (See photo). Bake 8 to 10 minutes in the preheated oven, or until golden. Let stand on cookie sheet two minutes before removing to cool on wire racks.



## MRSA 2.0

(this is a peanut butter cookie version of the previous MRSA recipe; not better than the 1<sup>st</sup>, just different)

- ½ c butter, softened
- ½ c peanut butter
- 1 ¼ c flour
- ½ c sugar
- ¼ c honey
- 1 egg
- ½ tsp baking soda
- ½ tsp baking powder
- ½ tsp vanilla
- M&M's

**PREHEAT** to 375°F. Beat butter and peanut butter. Add ½ c flour, sugar, honey, egg, baking soda, baking powder, and vanilla. Beat til combined. Beat in remaining flour little by little. Chill for 2 hours (easier to handle). Shape dough into 1 ½ in balls and flatten slightly. Place M&M's in bunches on top of dough. Bake for 7-9 min. or until golden brown.

## Tick Cookies

(yummy chocolate chip cookies, with chocoate frosting, and licorice legs!)

- ¾ c sugar
- ¾ c brown sugar
- 1 c shortening or butter
- 2 eggs
- 1 tsp vanilla
- 2 ½ c flour
- ½ tsp baking soda
- ¼ tsp salt
- 1- 2 c chocolate chips
- Chocolate frosting
- Twizzler's pull-n'-peel licorice

**COMBINE** flour, baking soda and salt in small bowl. **PREHEAT** oven to 350°F. Beat butter, granulated sugar, brown sugar in mixing bowl. Add eggs and vanilla and beat til smooth. Gradually beat in flour mixture. Stir in chocolate chips. Roll into 1 in. balls and place on cookie sheet.

**BAKE** for 9 to 11 minutes or until golden brown. Cool on baking sheets for 2 minutes; remove to wire racks to cool completely. Once cool, frost the tops of the cookies with chocolate frosting. Give each tick 8 legs made of the licorice.

Sorry, no picture available



## Mad Cow Disease Cookies

(cookies with white and dark chips, & oreo pieces?)

- $\frac{3}{4}$  c sugar
- $\frac{3}{4}$  c brown sugar
- 1 c shortening or butter
- 2 eggs
- 1 tsp vanilla
- $2\frac{1}{2}$  c flour
- $\frac{1}{2}$  tsp baking soda
- $\frac{1}{4}$  tsp salt
- 1c dark chips, 1 c white chips, oreos?

**PREHEAT** to 350°F. Combine flour, baking soda and salt in small bowl. Beat butter, granulated sugar, brown sugar in mixing bowl. Add eggs and vanilla and beat til smooth. Gradually beat in flour mixture. Stir in chocolate chips. Roll into 1 in. balls and place on cookie sheet.

**BAKE** for 9 to 11 minutes or until golden brown. Cool on baking sheets for 2 minutes; remove to wire racks to cool completely.

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## Mad Cow Disease 2.0

(we were going for a Holstein cow look with bug eyes...maybe didn't quite pan out. Anywho, they are chocolate chocolate chip cookies with white chocolate chips....don't really look like Holsteins, feel free to improvise!)

- 1 c butter (softened)
- $1\frac{1}{2}$  c sugar
- 2 eggs
- 2 tsp vanilla
- 2 c flour
- $\frac{2}{3}$  c cocoa powder
- 1 tsp baking soda
- $\frac{1}{4}$  tsp salt
- 2 c semisweet chocolate chips

**PREHEAT** 350°F. In large bowl, beat butter, sugar, eggs, and vanilla until light and fluffy. Combine the flour, cocoa, baking soda, and salt; stir into the butter mixture until well blended. Mix in the chocolate chips and walnuts. Drop by rounded teaspoonfuls onto ungreased cookie sheets. Bake for 8 to 10 minutes in the preheated oven, or just until set. Cool slightly on the cookie sheets before transferring to wire racks to cool completely.



## Listeria Rice Krispie Treats

3 tbsp butter

1 package (10oz) marshmallows

6 c rice cereal

Melt butter in large bowl in marshmallow. Add marshmallows and toss to coat. Microwave for 1 ½ minutes on high, stirring once. Add cereal. Stir well to combine. Press into greased 9 x 13 dish. Cool.



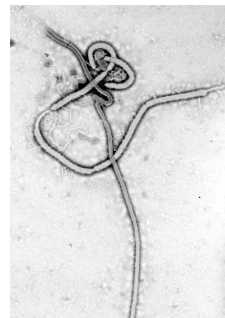
## Ebola Cookies

(for this cookie we were going for the worm like look the virus has on electron microscopy, see photo; they're just chocolate chip cookies with M&M eyeballs)

- ¾ c sugar
- ¾ c brown sugar
- 1 c shortening or butter
- 2 eggs
- 1 tsp vanilla
- 2 ½ c flour
- ½ tsp baking soda
- ¼ tsp salt
- 1c dark chips, 1 c white chips

**PREHEAT** to 350°F. Combine flour, baking soda and salt in small bowl. Beat butter, granulated sugar, brown sugar in mixing bowl. Add eggs and vanilla and beat til smooth. Gradually beat in flour mixture. Stir in chocolate chips. Shape dough into sort of worm like shapes. You can try to give them the classic "shepherds crook" of the virus.

**BAKE** for 9 to 11 minutes or until golden brown. Cool on baking sheets for 2 minutes; remove to wire racks to cool completely.



## Brucella Cookies

(these are chocolate chip cookies with gumdrops- a favorite with the kids)

- $\frac{3}{4}$  c sugar
- $\frac{3}{4}$  c brown sugar
- 1 c shortening or butter
- 2 eggs
- 1 tsp vanilla
- $2\frac{1}{2}$  c flour
- $\frac{1}{2}$  tsp baking soda
- $\frac{1}{4}$  tsp salt
- 1 c semi-sweet chocolate chips
- Gum drops

**PREHEAT** to 350°F. Combine flour, baking soda and salt in small bowl. Beat butter, granulated sugar, brown sugar in mixing bowl. Add eggs and vanilla and beat til smooth. Gradually beat in flour mixture. Stir in chocolate chips. Shape dough into 1 in. balls and place on cookie sheet. **DO NOT ADD** gum drops before baking!!! Very messy☺

**BAKE** for 9 to 11 minutes or until golden brown. Cool on baking sheets for 2 minutes; remove to wire racks to cool completely. Place gumdrops in cookies while they're cooling



*Brucella abortus*

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## Roundworm Cookies

(these are chocolate chip cookies with a gummy worm in the middle of the cookie- another favorite with the kids)

- $\frac{3}{4}$  c sugar
- $\frac{3}{4}$  c brown sugar
- 1 c shortening or butter
- 2 eggs
- 1 tsp vanilla
- $2\frac{1}{2}$  c flour
- $\frac{1}{2}$  tsp baking soda
- $\frac{1}{4}$  tsp salt
- 1 c semi-sweet chocolate chips
- Gummie worms

**PREHEAT** to 350°F. Combine flour, baking soda and salt in small bowl. Beat butter, granulated sugar, brown sugar in mixing bowl. Add eggs and vanilla and beat til smooth. Gradually beat in flour mixture. Stir in chocolate chips. Shape dough into 1 in. balls and place on cookie sheet. **DO NOT ADD** gummie worms before baking!!! Very messy☺. Bake for 9 to 11 minutes or until golden brown. While cooling add 1 gummy-worm to center of each cookie.

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Sorry, no picture of cookies available.

## Baylisascaris Brownies

(these are basic brownies with some frosting work. Bake the brownies and then decorate with worm-like stripes on top of the brownies with white frosting)

- 1 c butter, melted
- 2 c sugar
- 2 tsp vanilla
- 4 eggs
- 1 c flour
- $\frac{3}{4}$  c unsweetened cocoa powder
- $\frac{1}{2}$  tsp baking powder
- $\frac{1}{4}$  tsp salt
- White frosting

**PREHEAT** to 350°F. Stir together butter, sugar, and vanilla. Add eggs one at a time. Add flour, cocoa, baking powder, and salt. Mix well. Bake in greased 9x 13 baking dish for 30-35 minutes, until toothpick inserted near the center comes out clean. When cool, decorate with worm like strokes of white frosting.

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## Key Lyme Disease Cookies

(lime flavored cookies)

- 1 c sweetened condensed milk
- 4 tbsp key lime juice
- 4 tbsp flour
- 2 c unsweetened coconut
- 4 tbsp sugar

**PREHEAT** to 350°F. Combine condensed milk, lime juice and flour in medium-sized bowl. Stir in grated coconut and sugar. Drop teaspoons of batter onto greased baking sheets, leaving 2 inches between each (cookies spread). Bake 25 minutes or until golden. Remove from sheet to a rack to cool



Sorry, no picture of brownies yet!

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Sorry, no picture available

Thanks again for volunteering for our club! Hope you had fun with the baking and that you learned a lot about zoonotic diseases. If you need help coming up with fact sheets for your baked goods, just see below for some ideas and examples. **REMEMBER** to staple the fact sheet to each baggie. And be careful when using frosting, it should be dry by the day of the sale (especially at open house).

**THANK YOU!**





## Yellow Fever Lemon Bars



- An acute viral disease (Flavivirus) First identified in soldiers in 1802 Haiti Revolution
- Millions have died from this disease throughout the world
- Spread via mosquitos (\* *Aedes aegypti*)
- The name “Yellow Fever” was coined because a frequent symptom seen was jaundice (yellowing of the skin due to liver failure and accumulation of bilirubin pigment in skin)
- Vaccine was created in 1937 (10 year immunity)
- If you live in a highly mosquito populated region (i.e. Southern U.S.) wear bug repellent and avoid mosquito contact- sporadic presence of Yellow Fever in U.S.
- WHO- 300,000 fever illnesses and 20,000 yellow fever deaths per year (mostly developing nations)

## Key Lyme Disease Cookies



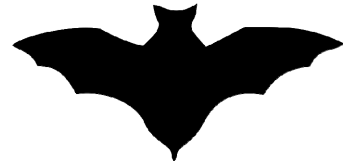
- Lyme disease
- a tick disease (caused by bacteria) rash
- Symptoms: fever, headache, fatigue, skin
- Symptoms can be treated with antibiotics, but can be debilitating if untreated
- Can affect both humans and pets
- Be careful if walking through fields/forests
- Wear bug repellent
- Keep dogs and cats on **tick prevention meds**
- If you are bit by a tick use tweezers to remove insect (Be sure to REMOVE HEAD of tick!!)

## Rabid Raspberry Cheesecake



- **Rabies virus** (Rhabdovirus)
- Kills >50,000 people per year (mostly in Asia, Africa, C. and S. America)
- Any mammal can get rabies. In Kansas, **skunks** and **bats** are the main carriers of rabies; dogs and cats can get rabies from these animals and many others (esp. through bites)
- AVOID CONTACT WITH ALL BATS, SKUNKS, & RACCOONS!!!!
- Contact with saliva
- Signs of rabid animal:
- Nocturnal animal out in daylight
- Wild animal walking slowly, approaching humans
- Normally nice animal behaving aggressively
- Helpful website- <http://www.cdc.gov/rabies>

## Rabid Bat Cookies



- **Rabies virus** (Rhabdovirus)
- Kills >50,000 people per year (mostly in Asia, Africa, C. and S. America)
- Any mammal can get rabies. In Kansas, **skunks** and **bats** are the main carriers of rabies; dogs and cats can get rabies from these animals and many others (esp. through bites)
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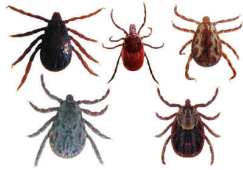
### **MRSA** (Methicillin Resistant *Staphylococcus aureus*)

- Caused by *Staphylococcus aureus* bacteria
- Often called a Staph infection
- Strain of staph that is resistant to broad-spectrum antibiotics commonly used to treat it. MRSA can be fatal
- Most infections occur in hospitals (Health Care-Associated MRSA [HA-MRSA])
- Older adults and people with weakened immune systems are most at risk for HA-MRSA
- Other form is community-associated MRSA [CA-MRSA]. This form is responsible for severe skin and soft tissue infections and pneumonia and is often contracted from close contact and dirty environments (i.e. athletics)

### **Listeria monocytogenes**

- Gram positive bacillus bacteria (rod shaped, like the sprinkles on this treat).
- Up to 10% of humans may be carriers of this organism, it is capable of causing disease
- **Transmission:** associated with a number of foods including raw milk, raw vegetables, soft cheeses, raw meats, poultry, and fish
- **Risk:** most healthy people won't show symptoms, but the disease is likely to occur in immune-compromised people. If a pregnant woman is infected with *Listeria*, the organism can also affect the fetus.
- **Source:** USFDA Center for Food Safety & Applied Nutrition

### **TICKS**



- Wildlife, domestic animals, and humans can all carry ticks and they are found in different varieties across all 50 states
- Ticks can carry and transmit diseases like Lyme disease, Ehrlichiosis, and Rocky Mountain Spotted Fever
- As a precaution, it's important to keep pets on year round flea/tick prevention and to thoroughly check both yourself and your pet after spending time outdoors, especially in wooded areas
- To protect yourself, wear hats, long pants and perhaps a band around your ankles to prevent ticks from crawling up your legs.
- Consult your veterinarian when choosing a flea/tick preventative