

Names of group members: _____

Life or Death Food Decision

As we know, based on the “10 percent rule”, about 90% of food energy in ecosystems is never transferred from one feeding level to the next. The ten percent rule of energy ability has an impact on survival.

Imagine you and two friends are shipwrecked on an island. You want to survive as long as possible, and it could be over a year before help arrives! Here are some details about your imaginary situation:

- The only food you have is 1 dairy cow and a thousand pounds of grain.
- It is not possible to plant anything (so no food crops will be available in the future).
- Seafood is not an option.
- There is no grass or hay on the island for the dairy cow to eat.
- There is plenty of clean, fresh water.
- There is enough firewood for cooking your meals.

Your assignment: Work in small groups to come up with a strategy that will maximize the number of days you can survive. Fill in the chart on the next page as you evaluate your options.

Options	Pros	Cons	Good survival choice? (Y/N)
<p>Let the cow eat a portion of the grain. Meanwhile, drink the cow's milk and your portion of the grain. When the cow has finished its grain, eat the cow.</p>			
<p>Drink the milk and then kill the cow immediately. Then spend the rest of the time on the island eating meat and grain.</p>			
<p>Don't feed the cow anything. Drink the cow's milk first, eat the cow next (when milk production stops), and then eat the grain.</p>			
<p>First feed all the grain to the cow, and drink the cow's milk. Then, after you run out of grain and the cow stops producing milk, eat the cow.</p>			
<p>Eat the grain first, and then eat the cow.</p>			