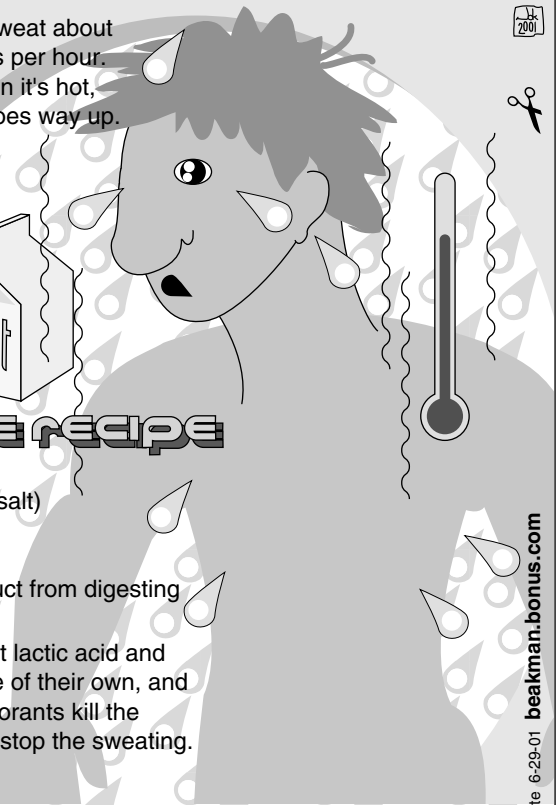
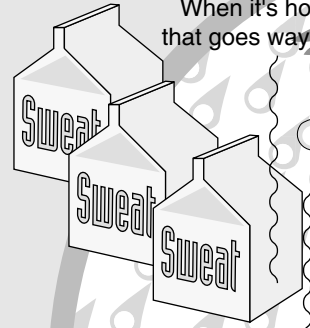


Dear Beakman,  
 Why do we sweat  
 when it's hot?  
 Camille Johnson  
 Monroe, Washington

Beakman or Jax  
 P.O. Box 30177  
 Kansas City, MO 64112  
 Questions, name & address

You sweat about  
 3 pints per hour.  
 When it's hot,  
 that goes way up.



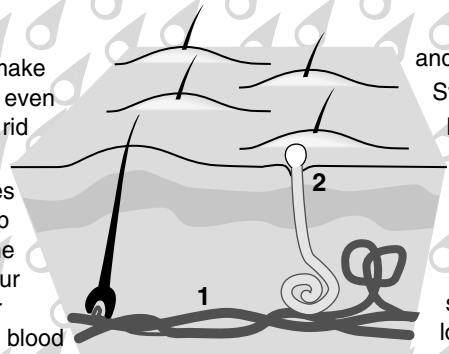
## SWEAT: THE RECIPE

- Water**
  - Sodium chloride** (table salt)
  - Potassium salts**
  - Urea** (waste product )
  - Lactic acid** (waste product from digesting fat and sugar)
- Some bacteria love to eat lactic acid and urea. They release waste of their own, and that's what B.O. is. Deodorants kill the bacteria. Antiperspirants stop the sweating.

Dear Camille,  
 When it's hot, *You Can* sweat as much as a gallon every hour. That's huge! There's got to be a good reason for that, right? Well, the reason is the heat that started it all. Sweat helps you move heat from inside your body to outside.

*Beakman*  
 Beakman Place

Our bodies are machines that always make heat. When the weather is hot, there is even more heat. Luckily there's a way to get rid of it – you know, a cooling system. A fluid that moves all through our bodies is blood. (1) As it travels, blood picks up excess heat. Blood moves heat from the inside of your body to the surface of your skin. (2) Sweat glands are all over your body. They remove some of the fluid in blood



and release it and the heat to the outside world. Sweat glands usually return things like salt and potassium back to the bloodstream. But when it's really hot and the sweat is pouring out, they can't keep up, and you can start to feel dizzy from the loss of salts in your blood. *Sports drinks* are really just water with salt and potassium and enough sugar to mask the saltiness. They help you restore the salts you lost from sweating, and lost fluids, too.

