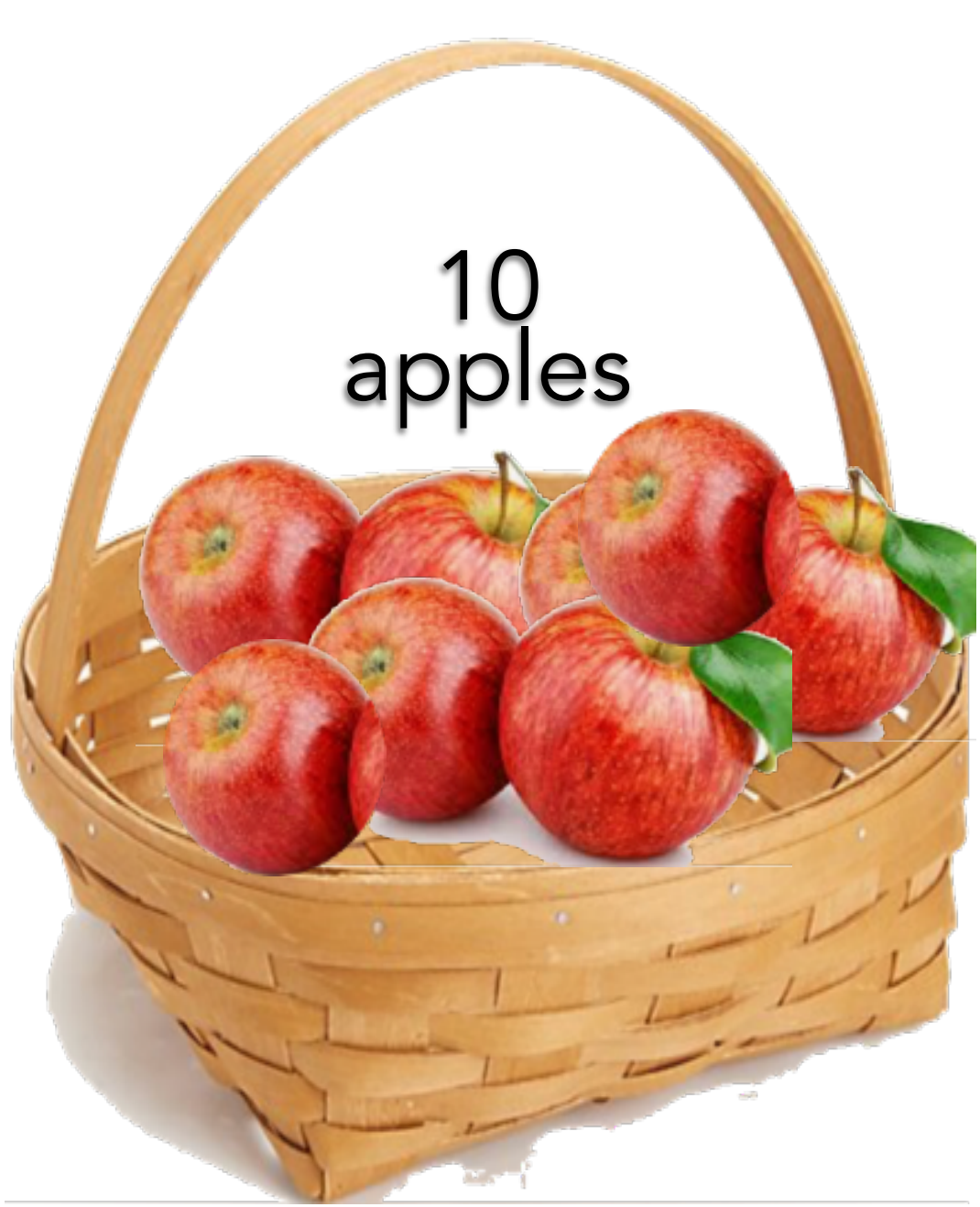
We do not calculate the CPI correctly: Substitution Bias

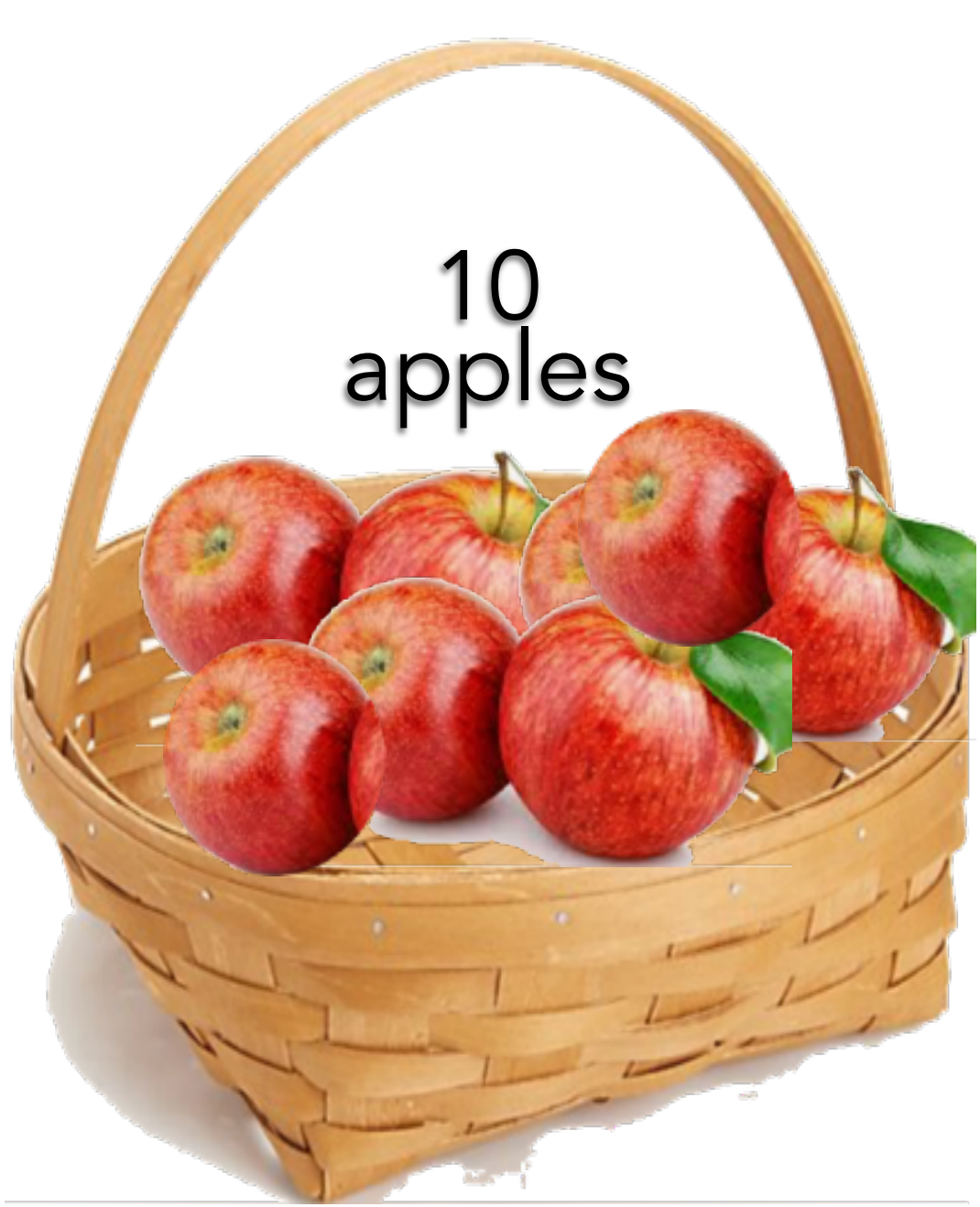
In the year when the basket was built, apples were cheap and thus most consumers bought them in large quantity:10 apples

CPI uses **old** quantity with new price


10
apples

$0.30/each

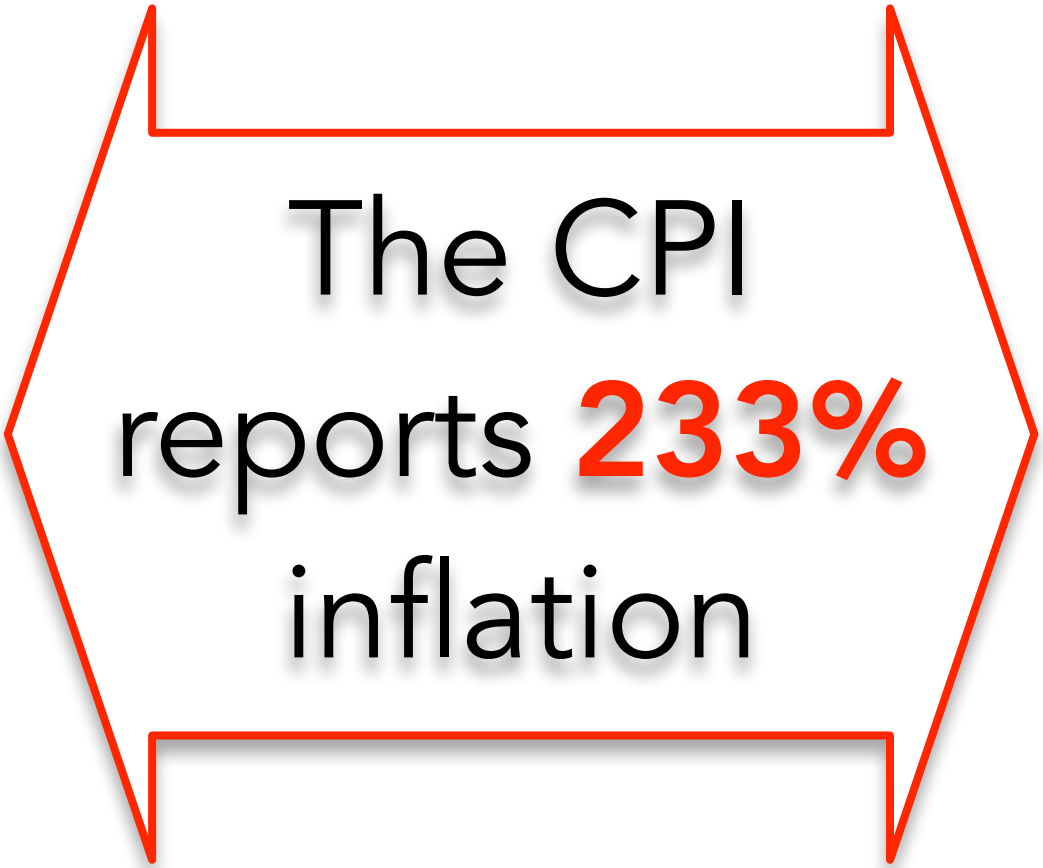
With time, apples become expensive and consumers substitute apples for a cheaper alternative


10
apples

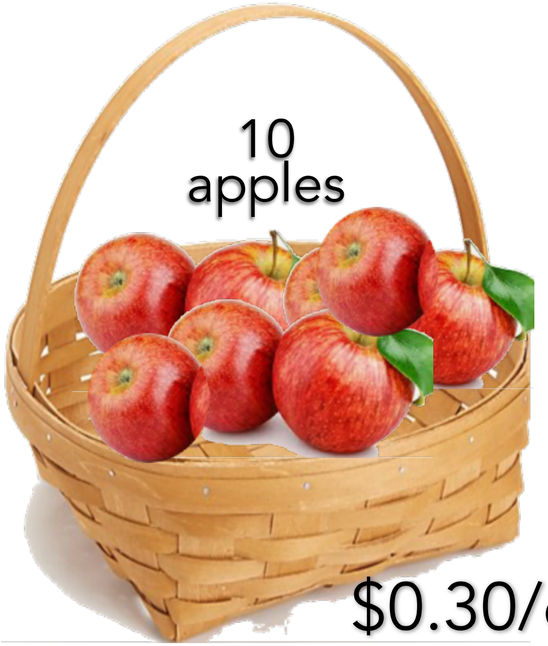
$1/each

Cost of the basket = 10x0.3 = $3

Cost of the basket = 10x1 = $10


The CPI
reports 233%
inflation

We do not calculate the CPI correctly: Substitution Bias

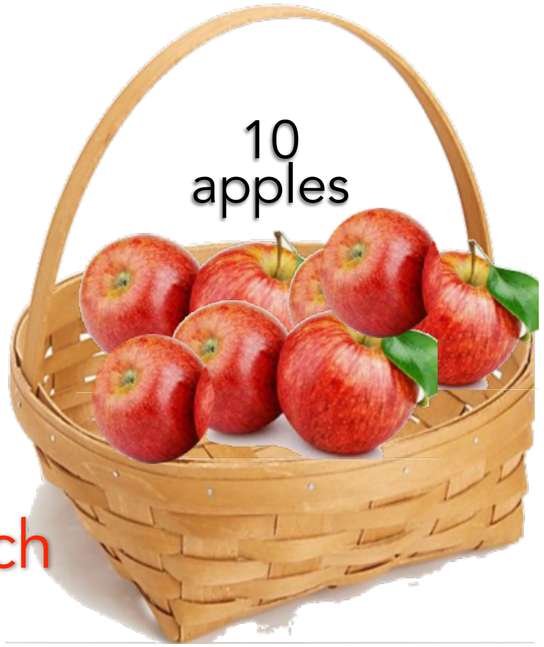


$0.30/each

Cost of the basket = 10x0.3 = $3

The CPI reports **233%** inflation

Cost of the basket = 10x1 = $10



$1/each

To avoid a drop in real salary, the nominal salary must increase by inflation