

## MEMORANDUM

**To:** All concerned

**From:** Peter Fisher

**Subject:** Stoichiometry of coffee

**Date:** Monday, May 23, 2016

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Our Jura coffee maker uses 22 g of ground beans to make a cup of coffee. Reducing either espresso (1 1/2 oz.) or a regular (8 oz.) on a hotplate and weighing the residue gives 1 g of material transferred from the beans to the liquid coffee. It takes the machine about 1 s to make the espresso and about 10 s to make the regular, so all the transfer happens in about 1 s.

A pound of good coffee costs about \$ 12 and makes about 21 cups of coffee at a cost of \$ 0.57/cup. Green mountain K-cups from Amazon are \$ 0.68, cheapest are \$ 0.34 each.