

SWISS WATER® Process 101



LESSON 1: Bean Composition

A typical green coffee bean¹ is composed of:

Soluble* Flavor Components		26%
-Caffeine		1.20%
Insoluble Components		74%



*soluble: susceptible of being dissolved in a fluid

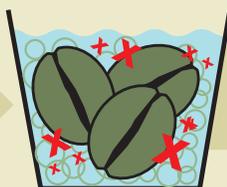
LESSON 2: Flavor-Charged Water

A long time ago we took some high-grown green coffee beans which were full of flavor...

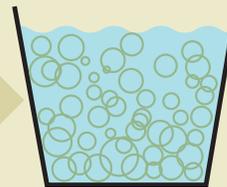
...and immersed them in pure water.



The water extracted both the coffee flavor solids and the caffeine from the beans.



These beans were then discarded and the caffeine was removed using a carbon filter, leaving just the water, super-saturated with coffee solids.



"Flavor-charged" water, composed of 25% flavor solids was created¹.

LESSON 3: The Art of Chemical-Free Decaffeination

Flavor-charged water is integral to the SWISS WATER® Process, which starts with top quality green beans and works as follows:

1. First, the beans are cleaned and soaked in water to prepare for caffeine extraction.

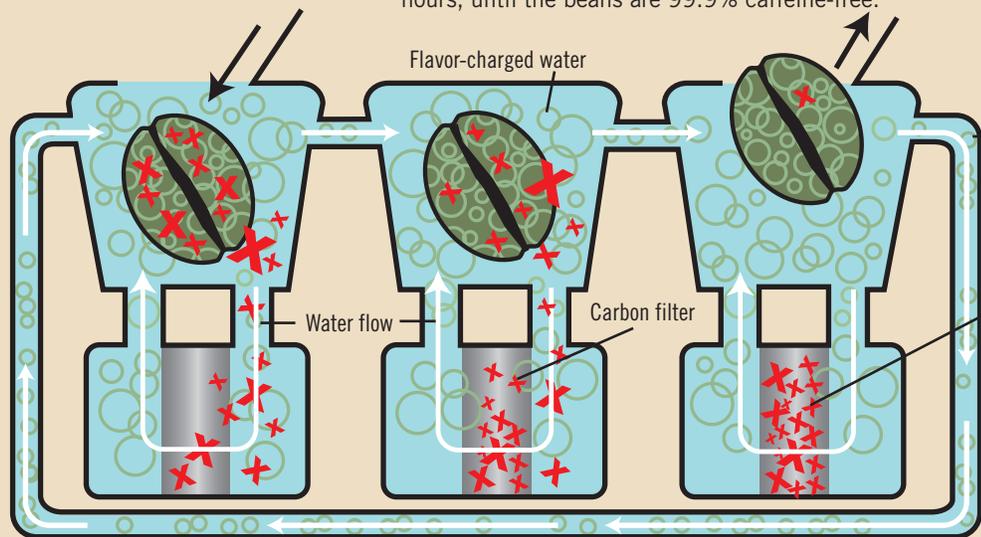


2. Next, the beans are immersed in the flavor-charged water. Initially the water is caffeine-free, and as a result the caffeine diffuses from the beans into the water. Since the concentration of flavor components in the bean and in the water are equal, only the caffeine is removed, leaving the flavor intact. The water then passes through a carbon filter that traps the caffeine. The now caffeine-free, flavor-charged water flows back to the beans to remove more caffeine. This process continues for approximately 8 hours, until the beans are 99.9% caffeine-free.

3. Finally, the decaffeinated beans are removed from the water. They are then dried, cleaned, polished, bagged and shipped.

A Typical Bean¹ after Decaffeination

Soluble Flavor Components		24%
-Caffeine		0.03%
Insoluble Components		76%



The flavor-charged water is now recycled to the start of the process, for the next batch of beans.

Trapped caffeine is removed from the carbon filter following decaffeination.

1 HOUR

8 HOURS

**99.9%
CAFFEINE FREE**

In-process caffeine analysis ensures the SWISS WATER® Process meets US, Canadian & European Industry Standards.

¹Percentages given are typical numbers and used for example only. Actual percentages may slightly vary from bean to bean.

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