

## Colouromatherapy

Research supports the concept that colors and scents, combined, produce a more intense experience than either presented alone. We have learned associations between certain smells and certain colors. Researchers have found that strawberry flavored drinks smell more pleasant and have a more intense odor when colored red than green (Zellner et al., 1991). White wine is perceived as having a different odor when it is artificially colored red. Morrot et al., 2001)

A study was also conducted using an MRI to map brain activity during the presentation of odors alone, colors alone, colors paired with associated odors (lemon-yellow, strawberry-red, spearmint-green, caramel-brown), and odors paired with non-associated colors (strawberry-blue, etc.). The researchers (Calvert et al) identified the areas of the brain where activity was noted during the presence of smells alone, and found, that when the stimulus included odors and associated colors, activity in these regions was enhanced above that observed to only the smell. Incongruent pairings, which did not have previous associations, suppressed brain activity to a level below that observed to odors in isolation. Associated color-odors (lemon-yellow) produced more intense activity; non-associated (strawberry-blue) produced less.

Since odors are partly perceived in the limbic portion of the brain, which is also the seat of emotions, it would make sense that odors affect emotions on a level which is below our conscious awareness. By pairing color with associated odor, the combined stimulus would provide a more intense emotional response than either one individually.