

**CHAPTER 1: SWEETNESS**

The Botany of Desire traces the apple's journey from its origin in the ancient forests of Central Asia, across the Silk Road to Europe, and eventually to America. There, in the early 19th century, it found its ultimate promoter: an eccentric character named John Chapman, who became known as Johnny Appleseed. Unlike most of the commercial apple trees cultivated today, which are grown by grafting buds onto young tree stalks, Chapman's apple trees – as you might expect from his nickname – were grown from apple seeds. Pollan explains the surprising fact that apples rarely pass on their flavor or even their appearance through their seeds. Apple trees grown from seeds tend to be biologically very diverse, and most of the fruit those trees will bear will taste bitter rather than sweet.

**Discussion Questions**

1. In New England, apple picking is an autumn ritual for kids and has been for years. What are some similar harvest rituals in your community or culture? Do you participate in them?
2. Johnny Appleseed is said to have compared himself to a bee. What do you think he meant? Is it an accurate analogy?
3. Compare the apple industry's "an apple a day keeps the doctor away" to more modern slogans involving food products. What has been their impact? What if it had been "broccoli today keeps the doctor away?" Would we have seen a similar reaction among consumers, or is there something peculiar about an apple that makes it uniquely appropriate for the marketing jingle?

## CHAPTER 2: BEAUTY

By satisfying the human desire for beauty, the tulip has risen from obscurity to fame – but along the way, it has also wreaked havoc. *The Botany of Desire* travels to the Netherlands, the home of "tulip mania," and introduces the viewer to growers and breeders who devote their lives to this lovely flower, which serves no practical human purpose other than to bring pleasure to our eyes. Like the apple, the first wild tulips sprang up in Central Asia. They made their way to Turkey, where they bewitched one of the world's most powerful men, Sultan Ahmed III of the Ottoman Empire, whose reckless spending on the flowers helped to topple him from his throne.

### Discussion Questions

1. Pollan talks about a flower's ability to "take over the world" with its visual and aromatic offerings. Which do you think is more important: beauty or aroma? Does the combination of the two create a whole that is greater than the sum of its parts? If so, how?
2. "Tulip mania" swept through Holland in the 17th century. What similar "manias" have occurred in the US? Was the bursting of the "dot com bubble" similar? Any others in the last 50 years come to mind?
3. Flowers, according to Pollan, are "exquisitely useless." What does this phrase mean to you? Do you agree with it? If they are useless, why are they so important to so many of us?

## CHAPTER 3: INTOXICATION

While tulip breeders certainly pay meticulous attention to their plants, nothing compares to the high-tech, 24-hour intensive care provided by the growers of another seductive plant: cannabis, better known to Americans as marijuana. *The Botany of Desire* explores the history and physiology of this lowly weed – one that has managed to make itself so desirable that nearly 15 million Americans risk arrest each month by smoking it.

### Discussion Questions

1. The film asserts that human beings have an innate drive to experience other states of consciousness. Why do you think that is? How do we most commonly explore altered states? Religion? Meditation? Running, yoga, or other types of exercise? What evolutionary benefit is there to this drive?
2. "Marijuana seems to 'second the motion' no matter what the motion is." What does this sentence mean to you?
3. Think about the notion of "unintended consequences" of the drug war in relation to marijuana. How did those unintended consequences affect the plant? How did they impact us?
4. Cannabis grows naturally in the wild (when allowed to do so) and requires no processing to be used as an intoxicant. Is that a justification for making it a legal substance? Why or why not? Is the cannabis plant different in substantial ways from tobacco, or from the grains we distill into alcohol?

## CHAPTER 4: CONTROL

The potato – a plant that yields an abundant amount of food per acre – has not only thrived but also greatly expanded its habitat by gratifying our desire to exert control over our environment. Not content with the potato in its natural state, we have tried to alter this plant by means of genetic engineering – a recently developed technology that marks a quantum leap in our relationship to plants.

### Discussion Questions

1. Early Peruvians adapted to nature in their attempts to domesticate potatoes. More recently, cultivators have sought to control nature, rather than allowing it to control them. What are the long-term implications for the two approaches to farming? Is one way inherently better than another?
2. Does American potato farming face the same kind of danger the Irish did during the potato famine? What are the similarities and differences? What would a modern day potato blight mean if one occurred in the U.S. today?
3. Is spraying chemical insecticides onto crops different than putting natural insecticides directly into plants' genes, as the New Leaf potato did? Why or why not?
4. A scientist in the film suggests that BT potatoes offer benefits solely to the farmer and not to the consumer. What if prices could be lowered significantly or calories per serving increased dramatically? Would GMO products then be more acceptable to you? To the general public? Why or why not?