

# The Bliss Point

**For nutrients that we like** and therefore seek out, there is a particular concentration that makes food most palatable.

- Too little sugar, and it's not sweet enough. Too much, and it's too sweet. The "just right" amount is the Bliss Point.
- Too little salt, and it's not salty enough. Too much, and it's too salty. The "just right" amount is the Bliss Point.
- Too little fat, and it's too bland. Too much, and it's too rich. The "just right" amount is the Bliss Point.

These are nutrients that have been *so important* to us in our evolutionary history that Natural Selection favored genetic variations that

1. enable us to taste these nutrients
2. make our brains respond with a "reward" [*we like it, it tastes good*]
  - The Reward Center of the brain gives us a little jolt of endorphins for our reward
  - Endorphins are the **endogenous morphine**-like chemicals that work on the same neuronal receptors as opiate drugs
3. make our brains *remember* what we did to get that reward, and make us *want* to do it again
  - This is run by the neurotransmitter, dopamine
  - Reward-seeking actions can become unbelievably powerful, which is what addiction is.

**In combination, sugar, fat, and salt act synergistically: combinations are far more addictive than any single one alone.** Mice, for instance, will work as hard to get a mixture of corn oil and sugar as they will to get cocaine.

**The food industry tries very hard to make each food contain combinations of 2 or 3 of these nutrients at their Bliss Points.** It's done to encourage us to *buy the food again*, because we really like it. That's why it's so hard to stay away from some of these foods. For those of us who are sensitive to the power of endorphins and dopamine, it becomes virtually impossible not to over-eat.

Below are some Bliss Point ratios of these nutrients, determined from the Nutrition Facts information for commercial foods. Different types of foods have different ratios, but within a class of food the range is fairly narrow —within a

factor of 2 or 3. NOTE: the food industry has not, so far as I know, tried to make addictive foods. Rather, it creates foods and asks panels of consumers to taste and evaluate them. It is only in retrospect that we have been able to apply what we have learned from psychology and neurobiology, and thus rephrase the story in terms of the brain's Reward Center and drug addiction.

