



A Sweet Predicament

I confess – I have always loved chocolate in all its forms, from super-rich premium truffles, to milk chocolate candy bars. But after a long winter of munching on the sweet treat, lately I've been trying to resist its lure. Now, however, a new study from Britain offers even more reasons to consume chocolate.

Neurophysiologist Dr. David Lewis, of the research company The Mind Lab, studied a group of couples and measured their heartbeats when alternately kissing and eating dark chocolate. According to Lewis, participants' heartbeats rose more significantly after consuming chocolate, as compared to after kissing their significant other. Chocolate, it's thought, releases serotonin in the brain, producing feelings of pleasure. "These results really surprised and intrigued us," says Lewis. "While we fully expected chocolate – especially dark chocolate – to increase heart rates due to the fact it contains some highly stimulating substances, both the length of the increase together with the powerful effects it had on the mind were something none of us had anticipated."

Another recent study from Germany published in last month's *Archives of Internal Medicine*, showed that the polyphenols in cocoa have a beneficial effect on blood pressure, lowering systolic blood pressure by an average of 4.7 points, and diastolic blood pressure by 2.8 points. Lead author Dr. Dirk Taubert noted that "regular consumption of polyphenol-rich cocoa products like dark chocolate may be considered part of a blood pressure-lowering diet, provided that there is no gain in total calorie intake."

In fact, in the past year or two chocolate has been lauded for its antioxidant qualities, contributing to heart health, lowering of blood pressure, improved circulation and diabetes, and reducing the risk of cardiovascular disease, hypertension, strokes, dementia and even cancer. Dark chocolate with a high cocoa content is considered to provide significantly more of these benefits than milk chocolate, with premium, top-quality products the likeliest source.

That's why the recent call in the U.S. to change the definition of chocolate has been causing concern among high-quality chocolatiers and consumers alike. Last month the U.S. Grocery Manufacturers Association (GMA) and the Chocolate Manufacturers Association petitioned the U.S. Food and Drug Administration (FDA) to consider changing the definition of chocolate to include products without the necessary amounts of cocoa butter and cocoa solids. These

expensive ingredients have lately increased in price an average of 28 per cent due to low crop yield in the Ivory Coast and Ghana. Instead, large-scale manufacturers such as Hershey are proposing that cheaper, more readily available substitutes such as vegetable fats and artificial sweeteners take their place. The changes would also allow greater flexibility in regulations, and allow for greater research and development in ingredients in all sectors.

Not surprisingly, at the other end of the scale, premium-chocolate manufacturers, represented by Burlingame, Calif.-based Guittard Chocolate Company, are voicing concerns about the petition. According to a company press release, president Gary Guittard says "If adopted [the proposal] would allow the current 'Gold Standard' for chocolate to be changed in a way that will ultimately result in short-changing the consumer and changing what we know and love as traditional chocolate."

Perhaps more concerning is the fact that man-made sweeteners are becoming increasingly scrutinized by consumers. Synthetic ingredients, and plant and/or vegetable-based ingredients, have been substituting for natural ingredients for decades now – with mixed results. Sugar substitutes such as aspartame, for example, have been both criticized and redeemed due to concerns of possible links to cancer (most recently the FDA confirmed the safety of aspartame, disputing the results of Italy's Dr. Morando Soffritti of the Cesare Maltoni Cancer Research Center linking the artificial sweetener to cancer in lab rats. Opinion on the results of this study differ however). And considering the ever-growing interest in organic and "natural" foods and ingredients, it's curious that the industry would petition for a move in the opposite direction. It also makes me wonder whether or not, if passed, chocolate without cocoa will be labelled as such so that consumers don't think they're gaining the benefits of flavanol-rich dark chocolate.

Guittard is leading its grass-roots protest through the media and through its website <http://dontmesswithourchocolate.com/guittard>. At press time the FDA had extended its deadline for hearing consumer input on the petition until June 25, a move Guittard was praising as a positive sign for its cause. Because of the far-reaching implications of the potential changes to both the confectionery sector in North America, and industry research in general, it will be interesting to see how this issue plays out over the summer months.

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