



## ORAL HEALTH

### KEY BENEFITS

- Cocoa slows free radical damage in gum tissues and slows the activity of the bacteria most responsible for tooth decay

### SCIENTIFIC SUPPORT

*"Consuming a cocoa-enriched diet could diminish periodontitis-induced oxidative stress, which, in turn, might suppress the progression of periodontitis."*

J Periodontol. 2009 Nov;80(11):1799-808. Preventive effects of a cocoa-enriched diet on gingival oxidative stress in experimental periodontitis.

*"CBHE is highly effective in reducing mutans streptococci counts and plaque deposition when used as a mouth rinse by children."*

J Indian Soc Pedod Prev Dent. 2008 Jun;26(2):67-70. Chocolate mouth rinse: Effect on plaque accumulation and mutans streptococci counts when used by children.



## VISUAL/EYE HEALTH

### KEY BENEFITS

- Cocoa's antioxidant properties protect the eye's sensitive tissue and nerves

### SCIENTIFIC SUPPORT

*"Our findings suggest that [cocoa procyanidins] inhibit diabetes-induced cataract formation possibly by virtue of its antioxidative activity."*

Exp Biol Med (Maywood). 2004 Jan;229(1):33-9. Ingestion of proanthocyanidins derived from cacao inhibits diabetes-induced cataract formation in rats.



## WEIGHT CONTROL

### KEY BENEFITS

- Obesity is a huge and growing problem in the United States
- Cocoa may regulate genes that control weight gain
- It also appears to suppress appetite and stabilize blood sugar levels
- Cocoa may influence brain chemicals to reduce cravings

### SCIENTIFIC SUPPORT

*"Ingested cocoa can prevent high-fat diet-induced obesity by modulating lipid metabolism, especially by decreasing fatty acid synthesis and transport systems, and enhancement of part of the thermogenesis mechanism in liver and white adipose tissue."*

Nutrition. 2005 May;21(5):594-601. Ingested cocoa can prevent high-fat diet-induced obesity by regulating the expression of genes for fatty acid metabolism.

*"Satiety and fullness were significantly increased after [ingesting] chocolate milk."*

Br J Nutr. 2007 Mar;97(3):579-83. Increased satiety after intake of a chocolate milk drink compared with a carbonated beverage, but no difference in subsequent ad libitum lunch intake.



## SKIN

### KEY BENEFITS

- Cocoa polyphenols protect the skin from UV radiation
- These polyphenols likely minimize inflammation in skin tissue

### SCIENTIFIC SUPPORT

*"Our study demonstrated that regular consumption of a chocolate rich in flavanols confers significant photoprotection and can thus be effective at protecting human skin from harmful UV effects."*

J Cosmet Dermatol. 2009 Sep;8(3):169-73. Eating chocolate can significantly protect the skin from UV light.



## DEMENTIA

### KEY BENEFITS

- Cocoa polyphenols minimize free radical damage and minimize inflammation (which contributes to stroke and dementia)
- Cocoa improves blood flow to the brain for improved cognitive performance

### SCIENTIFIC SUPPORT

*"The prospect of increasing cerebral perfusion [blood flow] with cocoa flavanols is extremely promising."*

J Cardiovasc Pharmacol. 2006;47 Suppl 2:S210-4. Cocoa flavanols and brain perfusion.



## BRAIN/STROKE

### KEY BENEFITS

- Like the heart and blood vessels, dark chocolate can protect the brain from conditions related to high blood pressure, clots and free radical damage
- The antioxidants in cocoa protect brain cells, blood vessels and tissue
- Increased blood flow also improves mental cognition and performance

### SCIENTIFIC SUPPORT

*"Our data suggest a promising role for regular cocoa flavanol's consumption in the treatment of cerebrovascular ischemic syndromes, including dementias and stroke."*

Neuropsychiatr Dis Treat. 2008 Apr;4(2):433-40. Cerebral blood flow response to flavanol-rich cocoa in healthy elderly humans.

*"Our results show that cocoa extract and epicatechin may exert a [brain and nerve] protective action by reducing [free radical] production."*

Eur J Nutr. 2009 Feb;48(1):54-61. Neuroprotective effect of cocoa flavonoids on in vitro oxidative stress.